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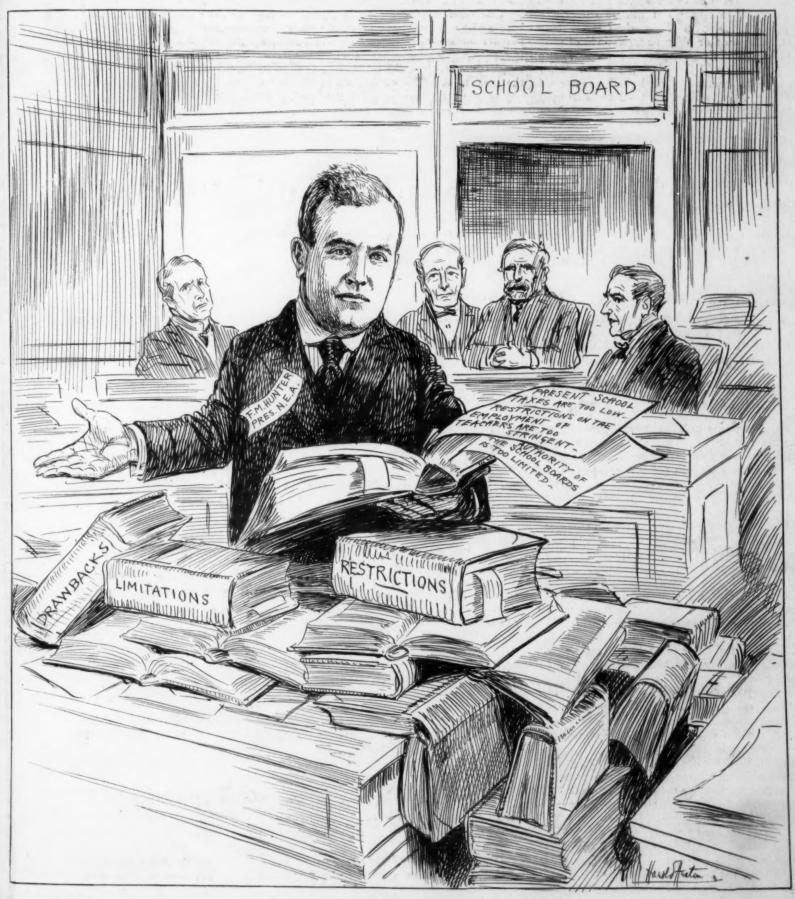
School Board Journal

Founded March 1891 by WILLIAM GEORGE BRUCE

Vo'ume LXI, Number 5

NOVEMBER, 1920

Subscription, \$3.00 the Year



SCHOOL LAWS MUST BE AMENDED

Open House

A Rural Superintendent's Wife



When, a bride of two weeks, I first attended a Teachers' Convention it was an easy thing to pick out the wives of the schoolmen. Their neat, last year's or older suits, threads of gray hair, lack of style generally and above all else the tired eyes and lines in their faces—"They ought to be ashamed to let themselves grow old and dowdy, the teachers don't—there is no need of it." Such was my heartless criticism. Now from the other side of the work looking back over the busy years I wonder how a man who takes up school work, especially in the rural districts, can find a wife.

My first call to duty was at six o'clock the second day we were keeping house (Saturday) a Board Member—of course the superintendent was asleep, and he was allowed to stay asleep for then I had not learned the lesson. "Always do everything possible the board member asks for lest he turn against thee and thine and thou art sent forth into the wilderness without a bottle of water."

The best room in the house is taken for an office and the phone is installed there. As very few schoolmen earn enough to pay for help in either the office or the home, the "silent partner" learns to typewrite. "There are so many things to be copied and I do need the help, dear."

Teachers resign and the candidate can be seen so much easier at the house-Miss S-is displeased, if we had her here for the week-end perhaps she would talk it out and be willing to teach the rest of the year. "Mr. D- will make a trip with me next week, probably Tuesday, can you put up a lunch for him and entertain at dinner that night-" Some nights you sit down to dinner at seven o'clock, more often it is after eight. Many times the tired man gets in at ten or eleven —"Miss E— couldn't handle the eighth grade problems so I stayed after the meeting to help her"-or "Mr. G- thinks his children are not treated fairly in school had a long talk with him"-or "Mr. T- wants his boy to go to work so had to test him for a certificate," etc. "So I missed the train, must get away on the first train in the morning (6.15) I'm so tired." So am I, but square my shoulders for the task: a cup of hot broth, collar loosened, rubbers removed, a nourishing meal of plain food, then the hot bath, alcohol rub, usually all done with protests from the tired man who would rather sleep. Perhaps he does say once or twice "You splendid girl," but later the work goes on without much attention, unless something is neglected.

The new teachers are hired and must be examined by the superintendent. It has happened that every room in the flat had a teacher taking examinations and I have walked around, then answered phone, and prepared lunch for all. After a specially hard Saturday the phone rings—a fellow worker is in town, will spend the Sabbath day with you, why—because you are convenient and it will not cost anything. You are in the midst of a big washing, the door bell rings, a teacher has missed her train, there is no other until evening, "Come right in you did

just right to come here." Book agents have to be well treated, they see many people in the course of a week and your record stands. Angry parents appear with complaints and curses, a square meal does more to straighten out the tangle than all the talking that can be done in the same time.

You entertain unexpectedly the speaker of the graduating exercises at lunch on a hot June day, the phone rings-a candidate for a position will arrive in half an hour. Said person has been carefully looked up and is desired for the position. Arrangements must be made to have the committee meet that evening. Plans must be made to entertain him at supper and breakfast as well as overnight. The lunch must be finished without any appearance of haste. The train must be met for the conditions are somewhat critical and the candidate better not have a chance to hear about it from some of the town people. Somehow you finish lunch, and in' a calm manner bid the speaker a gracious farewell.

The train whistles. Realizing your face is flushed, you run for the station. That must be he the tall one. "Pardon me, is this Mr. B—? This is Mrs. Q—. My husband asked me to look after you for a little while this afternoon as he has to be away." You see we use the same formula on so many people that it always seems to say itself. At the house—"Have you had lunch? Is there anything I can get for you? Please sit here, the view is prettier," etc., etc.

All the time you are conscious that the young superintendent has let the neighbor's cat in and it is in plain sight on the uncleared lunch table eating the broiled fish you didn't have a chance to taste of. Young Supt. realizing mother has returned takes the cat and goes out to play. You draw a long breath and try to be social for a few minutes.

While you discuss the topics of the day you are trying to decide if there will be milk enough for creamed chicken for dinner and, if there won't be, can you get a chance to phone for chops. "Where can the boy be? Why doesn't Mr. Q— come back? He promised to." One hour, two hours, three hours, four hours, if this goes on for ten minutes more I shall certainly cry. No that would never do because the kitchen is so untidy and he might go there after water. The stores will close in half an hour. Where is the boy, etc., etc.

Relief comes at last. With all the dignity it is possible to muster you prepare dinner and serve it with a smile. If you work half the night perhaps you can do some baking and make up for lost time. They have actually started. No one will see you now if you have a little cry all by yourself and it will do you good. He tried to be nice. The door bell—another candidate—it is impossible to say when he will return and I am not sure if the position is still vacant. Would you like to fill out a blank? All the while conscious of your red eyes. No I can't reach him by phone, etc., etc.

Do the applicants realize what it would mean to the silent partner if they kept the appointments they ask for instead of happening in any old time to wait for the superintendent? Do they realize when they wait for the superintendent, just what it means to the woman with the tired eyes who chats easily on the topics of the day (but, not on school topics) to give up in June three or four or five hours from her day? If they did they would go out and look over the town or take a trolley ride, or at least read the paper or magazine which she tries to divert them with.

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Did you ever think of it, dear teacher, that while you work hard you have a check due on pay day, and for the wife of the superintendent there is no check and no pay day? You could easily in ten minutes more time arrange the papers as you have been asked to, list the pupils in the same order each time. It takes no more time to send in reports promptly than it does to be from four to ten days late, and it means a great deal to the silent partner when this is done. In my own experience there are at present two teachers, only two, who organize every paper according to schedule, that means at least six hours office work which ought to take only twenty minutes.

The year before our second child was born, ten teachers were entertained overnight, twenty-six parents were soothed, fifty-one candidates were looked after, forty-five agents called, a total of one hundred and one meals furnished, twelve boarding places were looked up. This in addition to the usual housework, all the family sewing, as well as some office work.

My hair is turning gray, my face has tired lines, my clothes are out of style, I do not attend conventions any more because my clothes are so shabby.

Does it pay? YES.

The father of my children is doing a man's work in the world. Some of his magazine articles are listed by the U.S. bureau of publications. The poise and self-control which I have had to acquire are worth much to my family. Some of the teachers send holiday greetings, some let us know when they are promoted, occasionally we receive a marriage announcement. So far we have never heard from a teacher after she has married unless she wants a position for a relative. Of the two hundred who have toiled under the iron hand of the Superintendent, six have thanked him for fitting them for a higher position. I think that is a large per cent from what other men have told me about the work. There are problems outside of the schoolroom, dear teacher, and I feel sure these facts will find many a superintendent's wife who will have been through similar experi-

For my part in the plan is but weakness
My place in the structure small—
But what a thing for a worm of the dust
To be in the plan at all!

"GRANNIES."

THE SELECTION OF TEACHERS

John C. Almack, University of Oregon, Eugene, Oregon

The most important duty a superintendent of schools performs is the selection and appointment of his teaching force. Regardless of the introduction of new theories of education, the building up of administrative machinery, and addition of material equipment, the ultimate success of the schools rests now as always upon the work of the classroom teacher. Her selection is, therefore, a matter of supreme importance, and knowledge of the qualities of the applicant should be chiefly concerned with the main issue—success in the classroom.

Information of the fitness of the candidate is obtained from two main sources: (1) the applicant, and (2) references. This is sometimes supplemented by data gathered thru "scouting", but on the whole the appointing power bases its judgment of the fitness of candidates and the relative merits of applicants for the same position on matter contained in the application blanks, and reference forms received from other educators. Sometimes, both the data supplied by candidates, and the reference material come from intermediaries, as teachers' agencies and college appointment bureaus, but this in no wise changes the fact as to the original sources of information.

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To school officials who examine several hundred applications, and four or five times as many references, from the point of view of time alone, it is important that the data be fundamental in its nature, and at the same time compact and brief. Moreover, if some of the essential data can be objectively determined, it should be done. Objective measurement has proved effective in other fields in arriving at a just evaluation; and it promises some measure of protection against charges of favoritism and the influence of political "pull." At the least, absolute, measurable, and opinionated material may be separated for separate consideration, and irrelevant questions omitted alfogether. done, a fairer judgment of the ability of the candidates should result.

It is doubtless true that in a large sense no information about a candidate for a position in the public schools can be considered irrelevant. But there is no gainsaying the fact that some points are more important than others, and that in the very nature of things a complete description or "teachergraph" is impossible. There is no evidence that the superintendent who collects exhaustive and meticulous accounts of the qualifications of candidates is more successful in his choices than are those who scrutinize carefully a few outstanding essentials. In reality, the chances of a wiser selection are decidedly with the latter.

The purpose of this study is (1) to discover the nature of the information school officers now gather about prospective teachers, (2) to indicate what can be objectively measured, what is mere opinion, and what is irrelevant, (3) to suggest forms that will embody inferences gained from the consideration mentioned, and (4) to raise the question of the extent to which schools prepare teachers along the lines appointing officers believe fundamental.

The sources of information here used in addition to the literature of the subject are as follows: (1) application and registration blanks, (2) reference blanks: from college appointment bureaus, teachers' agencies, and city, county, and state superintendents, and (3) catalogs of teacher training institutions.

The total number of application and registration forms examined was 156, divided as follows:

Appointment bureaus 25, representing 23 states; teachers' agencies 39, 21 states; large cities 33, 29 states; small cities 50, 29 states; counties and states 9, 5 states. The small cities constitute a population of from 2,500 to 50,000.

The blanks were analyzed and the qualities listed tabulated in the order of their occurrence, those that were mentioned the oftenest coming first. What the order is may be seen from tables (I) and (II) which follow, table one containing the data from application forms and table two from reference blanks:

Seventy different qualities are enumerated. Of these, small cities lead with 46, agencies 45, appointment bureaus 45, large cities 30, and states and counties 25. There is an agreement on only 18 points, and only 14 are recognized by receiving a majority of the 156. Over fifty per cent of the questions were asked fewer than ten times, and twelve were asked only once. There seems to be an actual need of no more than 20% of the inquiries herewith listed, basing a judgment upon frequency of appearance alone.

TABLE I. APPLICATION BLANKS.

| | OHAL IMPO | Appt. | | Large | Small | Counties | |
|------------|---------------------------------------|----------|---------------|-------------|-------------|------------|--------------|
| | QUALITIES (70) | (25) | Agencies (39) | Cities (33) | Cities (50) | States (9) | Totals (156) |
| 1. | Education— | | | , | | | (200) |
| | High School | 25 24 | 39 | 33 | 50 | 9 | 156 |
| | Normal | 24 | 39 39 | 33 | 50 50 | 7 9 | 153 155 |
| 2. | Experience | 23 | 39 | 33 | 50 | 9 | 154 |
| 3. | Age | 18 | 29 | 28 | 50 | 9 | 144 |
| 4. | Married | 19 | 30 | 27 | 39 | 8 | 132 |
| 5. | Certificate | 18 | 34 | 24 | 46 | 8 | 130 |
| 6. | Health | 12 | 34 | 20 | 42 | 5 | 115 |
| 7. | Weight | 15 15 | 39 39 | 14 | 42 | 4 | 114 |
| 8. 9. | HeightLast Salary | 13 | 39 | 13 18 | 42 33 | 9 | 113 112 |
| 10. | Position Wanted | 21 | 39 | 21 | 18 | 8 | 107 |
| 11. | Salary Expected | 20 | 39 | 12 | 30 | 6 | 107 |
| 12. | Church | 25 | 39 | 6 | 19 | 4 | 93 |
| 13. | Special Subjects | 12 | 39 - | 8 | 26 | 5 | 90 |
| 14. | Photograph | 25 | 39 | 5 | 14 | 1 | 84- |
| 15. | When Available | 9 | 37 | 10 | 20 | 3 | 74 |
| 16. 17. | Where Born | 1 | 16 22 | 16 | 20 28 | 0 | 61 |
| 18. | School Activities | 17 | 39 | 0 | 9 | . 0 | 55 |
| 19. | Can Teach | 15 | 39 | 3 | 5 | 0 | 52 |
| 20. | Foreign Languages | 12 | 26 | 2 | 11 | 1 | 52 |
| 21. | Graduate Study | 2 | 7 | 7 | 28 | 0 | 44 |
| 22. | Children—how many | 12 | 22 | 5 | 2 | 0 | 43 |
| 23. | Locality Preferred | 11 | 32 | 0 | 0 | 0 | 43 |
| 24. | Subjects Studied | 19 | 16 | 4 | 2 | 0 | 41 |
| 25. | Race—Nationality Courses in Education | 5 11 | 5 6 | 6 | 9 | 1 | 26 |
| 26. 27. | Honors Won | 14 | 3 | 0 | 0 | - 0 | 17 |
| 28. | Testimonials Accept. | 0 | 2 | 5 | 8 | 0 | 17 15 |
| 29. | Travel | 6 | 2 | 0 | 3 | 1 | 12 |
| 30. | Professional Reading | 0 | . 0 | 3 | 6 | 2 | 11 |
| 31. | Summer School Attended | 0 | 0 | 6 | 3 | 0 | 9 |
| 32. | Success in Discipline | 1 · | 6 | 0 | 1 | 0 | 8 |
| 33. | Other Experience | 6 | 2 | 0 | 0 | 0 | 8 |
| 34. | Member of Societies | 2 2 | 6 2 | 0 | 0 | 0 | 8 |
| 35. 36. | Use Tobacco | 4 | .2 | 0 | 3 | 1 | 8 |
| 37. | Extension Classes Attended | 0 | 0 | 4 | 2 | 0 | 6 |
| 38. | Citizen of U. S | 0 | 0 | 5 | 1 | 0 | 6 |
| 39. | Elementary Education | 3 | 0 | 2 | 0 | 0 | ₩ 25 |
| 40. | Widow or Widower | 0 | 5 | 0 | 0 | 0 | 5 |
| 41. | Sex | 0 | 3 | 0 | 2 | 0 | 5 |
| 42. | Color of Hair | 1 | 3 | 0 | 0 | 0 | 4 |
| 43. | Greatest Number of Pupils Enrolled | 0 | 4 | 0 | 0 | 0 | 4 |
| 44. | Direct Boy Scouts | 0 | 0 | 0 | 3 | 3 | 4 |
| 46. | Eves Defective | 0 | 0 | 0 | 4 | 1 | 1 |
| 47. | Ears Defective | 0 | 0 | 0 | 4 | 0 | 4 |
| 48. | Strong Points | 0 | 0 | 3 | 1 | 0 | 4 |
| 49. | Grades in Subjects | 4 | 0 | 0 | 0 | 0 | 4 |
| 50. | Community Work | 0 | 3 | 0 | 0 | 0 | . 3 |
| 51. | Failed of Reelection | 0 | 0 | 1 | 2 | 0 | 3 |
| 52. | Teaching a Business | 1 | 0 | 2 | 0 | 0 | 3 |
| 53. 54. | Color of EyesStudied Under Whom | 1 0 | 1 2 | 0 | 0 | 0 | 2 2 |
| 55. | Belong Secret Society | 0 | 2 | 0 | 0 | 0 | 2 |
| 56. | Use Intoxicants | 1 | 0 . | 0 | 0 | 1 | 2 |
| 57. | Wear Glasses | 0 | 0 | 0 | 2 | 0 | 2 |
| 58. | Parents' Birthplace | 0 | 0 | 0 | 2 | . 0 | 2 |
| 59. | | 0 | 0 | 0 | 1. | 0 | 1. |
| 60. | Politics | 0 | 1 | 0 | 0 | 0 | 1 |
| 61. | Offices in Educational Association | 0 | 1 | 0 | 0 | 0 | 1 |
| 62. | Attend Teachers' Meetings | 0 | 0 | 0 | . 0 | 1 | 1 |
| 63. | Nervous Breakdown | 0 | 0 | 0 | 1 0 | 0 | 1 |
| 64. 65. | | 0 | 0 | 0 | 1 | 0 | 1 |
| 66. | | 1 | . 0 | 0 | 0 | 0 | 1 |
| 67. | | 1 | 0 | 0 | 0 | 0 | 1 |
| 68. | Do You Swear | 1 | 0 | 0 | 0 | . 0 | 1 |
| 69. | Attitude Towards Cards, Dancing | 1 | 0 | 0 | 0 | 0 | 1 |
| 70. | How Long Expect to Teach | 0 | 1 | - 0 | 0 | 0 | 1 |

Copies of 83 reference forms were received, distributed as follows: bureaus 13, agencies 27, large cities 10, small cities 29, states and counties 4. Many superintendents wrote that they use no specific form, but address a personal letter of inquiry to the references, leaving it to the latter to give such information as seems to him relevant to the particular case and adequate. The replies are thus personal, and a direct reflection of the standards,-usually at the time of writing uncritical,-of the reference. Instead of decreasing the probability of error from the subjective attitude it increases it, and the effeet will likely be to bring out into prominence either the very good or the inferior characteristics in the teacher's makeup, depending upon the feeling at the moment, and the favorable or unfavorable attitude of the writer. Important qualities may be omitted altogether, and a high or low general estimate given which if analyzed critically would have no basis.

Certainly nothing can be lost from being specific and definite. The agencies without exception stress a few characteristics, and often make possible their graphic representation. This is a distinct aid to busy superintendents who in the course of a year receive many requests for information about prospective teachers. The data gathered from the reference blanks is herewith

There are thus 55 different characteristics on which information is gathered from references. Only eight of these are unanimously voted for and receive a majority. The order is: bureaus 35, small cities 34, agencies 29, large cities 19, states and counties 10. Many of the agencies are tending to restrict their list to from six to eight inquiries. Their rule seems to be to collect as much as possible from the applicant who has a direct interest in giving it, and to limit the questions asked of references to the minimum: increasing thereby the returns, and at the same time giving that which is most likely to receive attention at the hands of the superintendent or school board who examines the credentials with a view to the election of the candidate. A very practical question is here involved.

The next point is to consider the material that is relevant (1) in application blanks, and (2) in reference forms. Some principles of selection are (1) the minimum essentials should be included, (2) the obvious may be omitted, (3) where information may be obtained from the registrant it should be done, (4) questions to applicants should be confined to matters of fact not of opinion, (5) effort should be made to determine the fitness of the candidate for a specific position: i. e., fourth grade, primary, art, athletic director, high school English-not simply for school work.

It is true that questions will arise of local

import on which data should be gained. There are localities where membership in a particular church is of significance to the success of the school. In the south where separate schools for white and for colored children are maintained, the question of color becomes an essential one to ask. Again, in schools that have a pension system, age becomes of paramount importance. In other cases it is difficult to understand just what conclusion regarding efficiency can be deduced from the statement of years-or as it is diplomatically put, date of birth-that cannot be arrived at thru noting experience, and other like qualities.

In a study made by F. L. Clapp at the University of Illinois published in School Review Monograph number 5, the opinion of 100 experienced school superintendents and principals of the ten most important teaching qualities is listed in order of frequency of mention. These qualities are:

Sympathy. 6. Enthusiasm. Personal appearance. 7. Scholarship. 8. Vitality. Address. Sincerity. Vitality. Fairness Optimism 10. Reserve

Ruediger and Strayer in a quantitative study of factors going to make up general ability among teachers give the following in order:

Discipline. Accord with pupils. Teaching skill. Experience. Social qualities. Initiative Personality. 10. Personal appear-Progressiveness. ance. 6. Ability to carry out. 11. Health. suggestions

In this study the correlations were worked out by Pearson's method, and the conclusion was that there is a very definite positive correlation between the first eight factors and general ability, and a very slight correlation-practically 0, in the case of the last.

Littler studied the causes of failure among teachers. (School and Home Education, March, 1914.) The most important reasons are, he found, as follows:

 Poor discipline.
 Weak personality. 4. Lack of interest. No daily preparation 3. Lack teaching 6. Failure to cooperate. skill.

As in the case of Ruediger and Strayer, Littler found that health plays but little part as a cause of failure.

Boyce in School Review Monograph number 6 made an intensive study of factors of succ in teaching. His list of the twelve qualities

which appear to be fundamental are: Skill in teaching how to study

Skill in teaching how to study.
Organization of subject matter.
Choice of subject matter.
Stimulation of community.
Initiative and self-reliance.
Growth of pupils in subject matter.
Adaptability and resourcefulness.
Daily preparation.

Skill in habit formation.
 Skill in stimulating thought.

Health.

11. Skill in questioning.
12. Definiteness and clearness of aim.

Various educators have expressed themselves on the subject of qualities of the ideal teacher.

A few statements are herewith given: Dutton. 6. Common sense Personality. 7. Character. Chancellor. Good physique. Health. Extra-school duties. 1. Intelligence. Cheerfulness. 3. Culture. Morality. Sincerity. Lyon. Character. Honesty. Temperament.

Baldwin. Tact. Judgment. Health. Gifted. 5. Scholarship. Cultured. Progressive.
White Palmer.
1. Sympathetic nation.
Intellectual wealth Personal aptitude. Scholarship. Sympathy. Will Power. Power to invigorate life thru learning. 3.

Willingness

forgotten.

to

TABLE II. REFERENCE BLANKS.

| | | | | Large | Small | States | |
|-----|-------------------------------|---------|----------|--------|--------|------------|--------|
| | (55) | Bureaus | Agencies | Cities | Cities | Counties ' | Totals |
| | QUALITIES | (13) | (27) | (10) | (29) | (4) | (83) |
| | | 12 | 24 | 10 | 29 | 4 | 79 |
| 1. | Scholarship | 6 | 25 | 8 | 28 | 4 . | 71 |
| 2. | Discipline | 13 | 26 | 9 | 16 | 4 | 68 |
| 3. | Teaching Ability | 5 | 27 | 8 | 24 | 4 | 68 |
| 4. | Character | 4 | 27 | 6 | 25 | 3 | 65 |
| 5. | Personal Appearance | 4 | 26 | 0 | 18 | 0 | 48 |
| 6. | Success | 3 | 4 | 13 | 20 | 3 | 43 |
| 7. | Cooperation | 3 | 14 | 5 | 16 | 3 | 41 |
| 8. | Defects | 9 | 4 | 3 | 14 | 0 | 30 |
| 10. | Personality | - 5 | 1 | 3 | 16 | 2 | 27 |
| 11. | Peculiarities | 0 | 9 | 1 | 12 | 0 | 22 |
| 12. | Social Qualities | 2 | 9 | 1 | 7 | 0 | 19 |
| 13. | Daily Preparation | 0 | 0 | 4 | 12 | 0 | 16 |
| 14. | Tact | 3 | 2 | 4 | 7 | 0 | 16 |
| 15. | Would you employ | 0 | 6 | 1 | 7 | 1 | 15 |
| 16. | Progressive | 7 | 1 | 1 | 4 | 0 | 13 |
| 17. | Greatest Weakness | 3 | 3 | 2 | 4 | 2 | 12 |
| 18. | Have You Seen Applicant Teach | 0 | 0 | 4 | 7 | . 0 | 11 |
| 19. | Enthusiasm | 3 | 0 | 0 | 6 | 0 | 9 |
| 20. | Efficiency | 0 | 0 | 2 | 7 | 0 | 9 |
| 21. | Greatest Strn. | 3 | 1 | 0 | 5 | 0 | 9 |
| 22. | Loyalty | 0 | 0 | 2 | 7 | 0 | 9 |
| 23. | Capacity for Work | 1 | 1 | 0 | 5 | 0 | 8 |
| 24. | Good English | 5 | 0 | 0 | 1 | 0 | 6 |
| 25. | Adaptability | 3 | . 3 | 0 | 0 | 0 | 6 |
| 26. | Leadership | 3 | 2 | 0 | 0 | 0 | 5 |
| 27. | Popularity | 0 | 4 | 0 | 1 | 0 | 5 |
| 28. | Originality | 4 | 0 | 0 | 0 | 0 | 4 |
| 29. | Veracity | 0 | 4 | 0 | 0 | 0 | 4 |
| 30. | Initiative | 3 | 0 | 0 | 0 | 0 | 3 |
| 31. | Reelection | 0 | 3 | 0 | 0 | 0 | 3 |
| 32. | Punctuality | 1 | 0 | 0 | 1 | 0 | 2 |
| 33. | Sincerity | 2 | 0 | 0 | 0 | 0 | 2 |
| 34. | Self-Control | 2 | 0 | 0 | 0 | 0 | 2 |
| 35. | Use Tobacco or Liquor | 0 | 1 - | 0 | 1 | 0 | 2 |
| 36. | How Much Experience | 0 | 1 | 0 | 1 | 0 | 2 |
| 37. | Cheerful | 0 | 0 | 0 | 2 | 0 | 2 |
| 38. | Neatness | 1 | 1 | 0 | 0 | 0 | 2 |
| 39. | Perseverance | 2 | 0 | 0 | 0 | 0 | 2 |
| 40. | Address | 1 | 0 | 0 | 0 | 0 | 1 |
| 41. | Discretion | 1 | 0 | 0 | 0 | 0 | - 1 |
| 42. | Good Sense | 1 | 0 | 0 | 40 | 0 | 1 |
| 43. | Intelligence | 1 | 0 | 0 | 0 | 0 | 1 |
| 44. | Judgment | 1 | - | 0 | 0 | 0 | 1 |
| 45. | Vivacity | 1 | . 0 | 0 | 0 | 0 | 1 |
| 46. | Affability | 1 | 0 | 0 | 0 | . 0 | 1 |
| 47. | Conscientiousness | 0 | 1 | 0 | 0 | 0 | 1 |
| 48. | Credit Good | 0 | 1 | 0 | 0 | 0 | 1 |
| 49. | Dress Showy | 0 | 1 | 0 | 0 | 0 | 1 |
| 50. | Athletic | 0 | 0 | 0 | 1 | 0 | 1 |
| 51. | Use Standard Tests | 0 | 0 | 0 | 1 | 0 | 1 |
| 52. | Age | 0 | 0 | 0 | 1 | 0 | 1 |
| 53. | Do Extra Duties | 0 | 0 | 0 | 1 | 0 | 1 |
| 54. | Complain Time to Society | 0 | 0 | 0 | 1 | 0 | 1 |
| 55. | Give Too Much Time to Society | .0 | U | U | | U | 1 |

All the factors that enter into consideration in selecting teachers may be classified as (1) absolute, (2) measurable, (3) opinion. The value of opinion depends upon the ability of the person who gives it, and his knowledge of the person who gives it. It is no worse for being definite, and for its being known as opinion. According to Hollingsworth the opinion of anyone on a given quality in some one else is in proportion to the degree to which the judge himself possesses the quality. For example, one who has a great deal of initiative is a good judge of initiative in others. To the three classes above, there might, as has been indicated, be added a fourth: namely those of transitory, local, and special interest as whether the applicant has had fifteen hours in education in states that have a requirement of that nature for a teacher's certificate.

Under the heading of absolute are put those facts which may or may not be of fundamental importance. For example the question of physical defects is important if the candidate is deaf, but is of no significance in making a comparative estimate of the respective merits of ten applicants without defects. Further, whether the candidate is married or not is mainly important to those districts where married teachers are not employed.

Many questions which could be absolutely determined are relegated to opinions, or the inquiry directed to the teacher. For example, a health certificate should weigh more heavily in determining the state of the teacher's health than her own statement or the opinion of her superintendent.

In weighing the measurable qualities account has been taken of the relative standings of the qualities as shown by the application and reference forms heretofore given. The classified minimum information which might be obtained on application blanks is:

| 1. | Name. | | Э. | Physica | 1 defe | ects. |
|----|----------|----------------|----|---------|--------|--------|
| 2. | Date of | birth. | 6. | Married | 1. | |
| 3. | Position | wanted. | 7. | Salary | expec | ted. |
| 4. | Health | (certificate). | 8. | | | United |
| | | | | States | l. | |

Absolute.

| Measurable. |
|--|
| 1. Education- |
| (a) College graduate100 |
| (b) Normal graduate 80 |
| (c) High school graduate 60 |
| (d) Post graduate, 10 points additional for each year. |
| 2. Experience— |
| (a) Ten to twenty-five years100 |
| (b) Five to ten |
| (c) 3 to 5, 25 to 35, |
| (d) 1 to 3, 35 to 45 50 |
| (e) None 40 |
| 3. Certificate— |
| (a) Highest grade required for position. 80 |
| (b) Second grade 60 |
| (c) Third grade 40 |
| 4. Professional Improvement— |
| (a) Ten hours' credit annually summer |
| school or extension courses 30 |
| (b) Average 5 hours annually 20 |
| (c) Professional reading, five books |
| yearly 10 |
| (d) Travel during summer 10 |

In the place of certificate the rating attained in examination may be substituted. In this case it is doubtless better to have five ranks as (1) superior, (2) excellent, (3) good, (4) fair, and (5) unsatisfactory. Grades received while in school are also good indexes to teaching ability, and may well be considered in selecting teachers. Clapp has estimated that a student who makes average class grades of 95 has chances of success in teaching at about two to one over a student whose class grades average 85. Regarding the value of experience, opinions differ. Doubtless there is, as has been maintained, a progressive increase in ability up

ate

(e) Publications 10

to ten years, then a period where experience contributes practically nothing to ability, and after twenty-five years a gradual decrease.

The same method of weighing application blanks has been followed with the reference forms. Five classes or ranks are indicated for checking, and a numerical value assigned each for convenience in reaching final evaluation. Only questions of opinion are asked references, since matters of fact may be more easily obtained elsewhere. It is more or less of an imposition to ask a busy superintendent who receives many such requests every day to rate teachers on twenty-five to fifty points, so the inquiries are few in number; another very good reason being that if the forms were not brief they would not be filled out at all. If standard tests are used teaching ability may be transferred from the realm of opinion to that of ineasurable qualities.

REFERENCE FORMS.

| | | A | В | C | D | E |
|-----|---------------------------|--------|-----|------|------|------|
| 1. | Scholarship | | | | | |
| 2. | Discipline | | | | * * | |
| 3. | Teaching Ability | | | | | |
| 4. | Character | | | | | |
| 5. | Personal Appearance | | | | | |
| 6. | Cooperation | * * | * * | | * * | * * |
| 7. | Personality | * * | * * | | | |
| | Values assigned the ratin | igs ab | ove | of t | he f | irst |
| for | ur are: A=50, B=40, C | =30. | D= | =20. | E= | 10. |
| - | 1 4 1 1 1 1 | , | | - , | | |

and of the last three A=40, B=30, C=20, D=10, and E=5.

In order to show the use of the objective method let us rate two teachers whom we assume to be applicants for the same position, that of fourth grade in the elementary school. Both are between 25 and 30 years old, are in good health, have no physical defects, are citizens of the United States, and are willing to accept the scheduled salary. The ratings on the application forms compare as follows:

Teacher A.

| Normal graduate | 80 | |
|-------------------------|-------|-----|
| Five years' experience | 80 | |
| Certificate 1 | 80 | |
| Improvement— | | |
| 5 hours' credit | 20 | |
| Professional reading | 10 | |
| | - | |
| Total | | 270 |
| Scholarship | 40 | |
| Discipline | 30 | |
| Teaching Ability | 40 | |
| Character | 50 | |
| Personal Appearance | 40 | |
| Cooperation | 30 | |
| Personality | 40 | |
| | these | |
| Total | | 270 |
| Comparative Rating | | 540 |
| Teacher B. | | |
| Normal graduate | 80 | |
| Three years' experience | 60 | |
| Certificate 1 | 80 | |
| Improvement— | 00 | |
| Travel | 10 | |
| Professional reading | 10 | |
| Tiotessional reading | | |
| Total | | 240 |
| Scholarship | 40 | 240 |
| Discipline | 40 | |
| Teaching Ability | 40 | |
| Character | 50 | |
| Personal Appearance | 30 | |
| Cooperation | 40 | |
| Personality | 30 | |
| resonantly | 00 | |
| Total | | 270 |
| | | |
| Comparative Rating | | 510 |

Teacher A would be the better qualified for the position, and as a result of using objective ratings the superintendent would not be accused of yielding to political influence in nominating her for it. There is also something to be said in favor of maintaining the objective attitude in selecting teachers. It is true there

'Actual cases.

are conditions in which a greater importance would be assigned to ability to discipline, in which case teacher B would doubtless be the choice. But in doing this one should realize that he is putting an unusual emphasis upon this quality in order to meet particular circumstances. There is then abundant defense for such action, but not if teacher B is elected because there is a notion in the mind of the superintendent that discipline is far more important than scholarship and teaching ability.

As brought out in the study previously open letters of reference are given consideration by two agencies, and by superintendents in five large cities, and in eight small cities. clearly shows that the practice is rapidly becoming obsolete, and has no place in the selection of teachers in a modern school system.

The last concern of this study is with the work of teacher training institutions to meet the needs laid down by superintendents. Summarized we may say that the schools accomplish or do not accomplish the following:

Provide a measureable attainment in schol-

arship.
2. Offer professional courses, some of which-

3. Afford a brief teaching experience in the practice department, of so little value as to be considered negligible by school officers when ask-

ing information about experience. 4. Term classes in school management in which the problem of discipline is discussed. This is true of the normal schools, but is usually

inapplicable to the colleges and universities.

5. Teaching ability supposed to be improved thru courses in educational psychology may or may not be required.

6. The development of character, a spirit of cooperation, and growth of personality incidental and vicarious.

Provide opportunities for the improvement of teachers in service, but seldom follow up their own graduates, nor instruct them in the requirements of their profession, the opportuni-ties, and the agencies available for their advancement.

8. Do not offer opportunity except to the proficient in athletics, debate, dramatics, and music, etc., and except in summer school give no training in the teaching of these specialties.

These conclusions, therefore, seem justified:

 A great deal of obvious extraneous and ir-relevant information is gathered by school superintendents regarding the qualifications of appli-cants for teaching positions at the expense of the time of both superintendent and the appli-

cant.
2. Such a mass of ill-assorted matter renders scientific evaluation impossible or exceedingly difficult.

A survey of application and reference forms shows that but few salient points in teacher selec-

tion exist.
4. These should be selected as the critéria for a basis of judging the fitness of applicants for specific positions.

5. So far as possible these should be rated in an objective manner.

an objective manner.

6. Teacher training institutions are not engaged in preparing teachers directly along the lines of many of the requisites on which their desirability and success depend.

From an unpublished study on "The Training of Teachers for Special Activities" by H. L. Kirk, University of Oregon, 1917.

TO REPORT ON EDUCATIONAL JOURNALISM. A review of recent developments in educa-

tional journalism is to constitute one of the chapters in the 1920 Biennial Survey of the U. S. chapters in the 1920 Biennial Survey of the U. S. Bureau of Education. "In this review," says Commissioner Claxton, "it is planned to give attention, not only to the work of the professional educational periodicals thruout the country, but also to treat of the activity of the daily press in behalf of education—thru the establishment of education pages or departments, or special treatment of educational matter in the editorial column." A special section of the study will deal with the agricultural press and its work for rural education. W. Carson Ryan, Jr., educational editor of the New York Evening Post, is directing the survey for the Bureau. the survey for the Bureau.

EDUCATIONAL TUMORS

J. Milnor Dorey, Trenton, New Jersey

In all communities there are some educational tumors. An educational tumor is an individual in the school system who breeds discomfort, paralyzes the flow of progress, and poisons the community. Sometimes the medicine of public opinion will absorb him into the school system. Often nothing short of the official scalpel will get rid of him.

First is the commissioner, or member of the school board. He has not accepted office because of his knowledge of or interest in school affairs. He holds office because of his love of personal show or as payment of a political debt. He has no fixed pedagogical principles or philosophy. The conduct of the public schools to him is more or less of an amusing game. His judgment on issues in meetings is flash and inconsistent, not ballasted. He accepts homage from principals, teachers, and janitors. He will boost the private ambitions of anyone in the school system either for personal gain or from prejudice, and if exposed will go to any length to He believes in "pitiless pub-'save his face." licity" only when defending himself or his friends in their schemes, and will use his connection with newspapers, when he has one, to mould public opinion to suit his desires and biased views. He is given to profanity and to association with hotel loafers in whose presence he transacts school affairs. He devises ways to place on the payroll friends and relatives, and makes promises to contractors without the warrant of the school board. He votes automatically in the negative on any question of expenditure or improvement. When faced with a decision he will hedge, backfire, or blurt out an unexpectedly new and impossible view. He constantly baffles and angers his associates. He will neither offer anything constructive or "stay put" when that is the only way to dispose of him. He is a bull in a china shop.

The school superintendent or principal of a school may often be a tumor. He cannot get along with his teachers. He browbeats and bullies, threatens and gives commands. He always has some pedagogical chip on his shoulder, breathing defiance to any who disagree with him, lauding those who agree with him. He can work best only when surrounded with sycophants and weaklings who either from fear or hope of favor bend the knee. He loves to talk about himself. He takes himself and his opinions very seriously and thinks it a privilege to lay bare for your profit just how his mind works. In public meetings he speaks loudly and often. In seeking interviews his affairs must come first. He repels students by his cold analysis of their defects. He is quick to seize upon new ideas and claim them for his He borrows much from the work of others, and is clever in getting people to labor for He rarely makes an appeal for projects on their merits but accomplishes his ends by deals and frame-ups with citizens, members of the school board, and the newspapers, all of whom he tricks into support by sophistry. If a teacher leaves his employ because of friction, or because he was too bold in expressing his opinion and it was made plain to him that subservience only was wanted, he will exercise the advantage of his position of superior in office by preventing him from getting another position. He keeps those with too much initiative in the background by giving them undesirable positions, by petty faultfinding, and by eventually forcing them into an impasse. He preaches democracy but practices autocracy. If he has

a superior in office he will endeavor to undermine his position by innuendo, by studied slights, and will follow up his advantage to gain standing and influence for himself. He is not satisfied until his ego labels all the activities of the community.

Another pestiferous tumor is a certain type He lacks tact, scholarship, and personality. He bluffs in the classroom, among his associates, and in the community. He attempts familiarity with the pupils, or, as the mood strikes him, is harsh, crude, and objectionable. He uses slang, kills time in his class with aimless talk, and spends more energy thinking up ways to avoid work than to accomplish results. He is always offering better ways of running the school than the one laid down by the prin-He is constantly suggesting short cuts, and shirks when he can. He is unpunctual with his reports and his work is not neat. He spends a great deal of time seeking notoriety in the community, often incurring the jealousy of his principal if his work happens to have merit and the principal is built along small lines. He cannot discipline because he does not enjoy the respect of his pupils. He studies his subject only enough to keep ahead of his class. He wants to avoid being taken for a teacher, and proclaims this desire by affectations of clothes and mannerisms. He tries to keep himself immune from the pedagogical atmosphere by refraining from educational literature and conventions. He may be grasping and can see advantage in serving as a stool pigeon for his principal, obeying instructions to the letter, spying on other teachers, taking every occasion to exploit himself and his efficiency in the eyes of the principal. He is a trouble maker, always on the alert for gossip, seeking every opportunity to undermine the work and standing of an associate if he can profit thereby. He is a misfit, a menace to the profession, a standing reason for condescension by the men of the business and professional world, and a live argument for keeping the salaries of teachers down.

There are many tumors among the pupils. This form of tumor is lazy, noisy, flip, and aggravating. He likes to nag teachers in order that he may get a "rise." He is a constant trouble maker with teachers and pupils by his petty lying, thieving, and gossip. He writes on the walls, cuts his name in the woodwork, makes little noises in the classroom and affects an air of innocence when glances are thrown in his direction even joining in the general frown by appearing indignant. He schemes to throw suspicion on others for his own acts. He mutters in class, or openly defies the teacher by audible talking. He is obstinate, self-assertive, untamed. He wants to be first in all the activities of the students and to get there by intrigue rather than by merit. If he fails in any enterprise he makes things unpleasant for the win-He is frequently tardy and truant, often forging notes to explain his defections. He complains at the back work he has to make up after absence and tries to put the blame on the teacher for his own inability to catch up. He complains regularly about his grades, making comparisons with other pupils, insinuates favoritism, and misrepresents his teachers at home. He cheats in examinations and cribs in classwork. He calls his teacher by her last name or some objectionable nickname and respects her only when her attitude toward him seems to condone his weakness. He looks upon his entire school life as a sort of joy ride which

he wants to get the most fun out of because at the end of it lies real work, with those standing over him whose standards are presumably more rigid and exacting. But so long as he remains in school he is a stumbling block to the work of the school, sand in the bearings, a fly in the ointment, and a thorn in the flesh of the honest teacher who is striving to be of real service.

Last but not least is the parent tumor. He is always nursing a grouch against the schools. He refers constantly to the fact that he is a taxpayer and that the schools are not doing thus and so. There are too many fads and frills, there is too much home study for his children (often he has none), and yet he complains because the schools do not give them enough to do so that they will not run the streets. He cries favoritism for his own children and denounces the teacher who advances his neighbor's. He will invariably side with his child against the teacher in a given controversy. He is full of ideas of just what is the matter with the public schools, and fills the columns of the newspapers with his criticisms and suggestions. He is always after the scalp of some teacher or school commissioner. He injects politics into school affairs, and solicits for or against some individual on those grounds. He has the habit of visiting the schools to spy on the teacher or the work, and makes snap judgments on what he sees, coloring it with the prejudgment he has already formed and wishes to maintain. He is always organizing some uplift society to supplement the schools and to burden it further with the many enterprises misguided citizens think necessary to its welfare and efficiency. He is a most baffling tumor because he is hard to lay his finger on, and once pressed, hard to squelch. He holds no official position and is not amenable to the public. He must be endured, unless the blighting edge of scathing sarcasm from some responsible source can cut him out

These are the tumors that blight a school community. Indifference or criticism may silence them; often they need the knife. Often rebuffs make them more insolent and insistent. They never seem to learn anything. They think it strange that they should be singled out for censure. They are quite convinced that they cannot make mistakes or possibly be in error. They still ply their educational tricks, play at their old game. When alarmed, they run to cover and cry out to the "interests" to protect them, and then turn on their accusers, charging them with the same chicanery they have been practicing. When in a dilemma the course of honor to them is to "save their face." It never occurs to them to speak and live the truth.

Our schools aid to educate our children, our laws to protect them; we surround them with restrictions intended for their welfare; but neither schools, nor laws, nor both, can take the place of parents or relieve them from responsibility. We say, "There is no place like home." It is the parents who make the home—make it a place where children love to be, or one from which they are glad to escape. The saddest stories of life are grouped around unhappy or uncongenial homes and parental neglect and inability to control.

ON CERTAIN FALLACIES CONCERNING THE USE OF STANDARD TESTS

Geoffrey F. Morgan

The other day I wandered into a school building to do some observing. I found the superintendent standing in the hall, clutching the bell rope in one hand and his trusty Ingersoll in the other. His look was one of strained anxiety.

"How do you do," I said. "I want to spend

"Just a minute, please," said he with a warning gesture, and I relapsed into silence while he tightened his grip on watch and bell cord. A few seconds later he gave the rope a smart jerk, and then the tension of both himself and the cord slackened quite perceptibly.

"We're giving a few standard tests and measurements this morning," he explained as he led the way to the office; "and that was the closing signal for the last of them."

"Have you given many?" I asked.

"Quite a number. I did some special study on the subject last summer and I have been making a considerable use of the different scales in testing the results of our grade teaching."

"No, I'm sorry to say they are not. I find that the arithmetic tests show the pupils considerably below standard. Then, too, the reading is not what it ought to be at all. I think the handwriting has improved since we started using the Thorndike and Ayres scales, but the spelling is miserable, and so is the composition."

"How much do you pay your teachers?"

"Forty-five dollars a month," was the answer.
"But do you find," I asked, "that you can get competent teachers for that amount?"

"Well no, of course we can't, but it seems as if that were all the district is able to pay."

"How long do they stay with you?"

"A year is the usual time. Of course a few stay longer, but on the other hand some of the good ones get up and go right in the middle of the term. I don't like it, but on the other hand I don't feel as if I should stand in their way when they can get a better salary elsewhere. Sometimes I dismiss a teacher outright, but not very often, because it is too hard to find others."

Teachers at Forty-Five a Month.

"How do you fill the vacancies when they do occur?"

"We advertise, or call up the agency, or just wait for someone to make application."

"At the same forty-five dollars a month?"

"Yes, as a rule. Sometimes, however, we have to pay fifty dollars to get anyone at all, even if the former teacher was only getting fortyfive."

"Then as a matter of fact, all you do is to change one incompetent teacher for another incompetent one. It can't be possible to get a really clever trained teacher for any such figure, and if you should find one by chance, she would soon move to a better place."

"That's about it."

"Well, in that case, what is the use of giving the standard tests?"

"Why, they show—er—they show where the pupils are weak, and how far below the standard they are, and—er—many other things."

"Exactly so, but what is the use of finding that out, unless you have teachers who are competent to correct it."

"One value of the standard tests is to improve the ability of the teacher in service."

"Yes, but you have just said that the teachers seldom stay a second year in any case, and surely if you improve them to any marked degree, the



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chance of their staying on is just that much less."

"Maybe so."

"In other words, the net result of your standard tests and measurements is to show that poor teachers do poor work, and that good teachers do good work. Surely common sense would serve to tell you that, without employing the Hillegas scale and the Trabue tests to prove it!" I mention this case of the zealous superintendent in passing, because it is a fair example of the confused thinking that is being done by a good many schoolmen.

Merely Evidence of Inefficiency.

I have no desire to ridicule the various tests which have been established by such careful workers as Ayres and Thorndike and Hillegas and Trabue. I have used them myself in my own schools, and recognize their value in providing definite standards on which to measure efficiency of pupils, and sometimes of teachers also. What I do deplore is the tendency of schoolmen to regard these tests as a sort of panacea for schoolroom ills, and to accept them as a remedy for inefficiency, instead of merely as an evidence of it. Just as long as schools employ teachers without proper training and education, and pay them less than a wholesome living wage, just so long may we expect the pupils to fall below the standards in spelling and grammar and writing and everything else.

We criticize the fifty-dollar teacher because she does not give us a good school. As a matter of fact we have no right to expect any school at all for that figure. What right has America, anyway, being a great, prosperous, efficient country, to ask men and women to teach its children for less than the wages of hod earriers and street sweepers? What right have we to appoint an immature, uncultured girl, utterly untrained in the technique of her profession, and then condemn her because her work does not measure up to standard? We may as well face the fact squarely that the work of the pupils will never measure up to standard until they are taught by teachers who measure up to standard.

No doubt our friend the superintendent was quite sincere in his efforts to improve the schools, but the truth is that he was altogether on the wrong track. Instead of taking up time and effort and material to prove what was al-

ready evident to the meanest capacity, he ought to have devoted the same time and energy to educating his public concerning the needs of the schools. It is arrant nonsense for any town to say that it cannot pay its teachers more than fifty dollars a month.

My good friend Dr. Evenden has set the minimum standard for teachers' salaries at \$1,200, and that is small enough. Every superintendent who finds his teachers drawing less than that can afford to ignore the standard tests altogether until he has succeeded in awakening his community to the vital necessity of better salaries.

To do this, he must plan a systematic campaign of education. By letters, by newspaper articles, and by addresses, he must put the situation plainly before the public. Nor will it do to make general statements, or to quote from authorities who are unknown to the local patrons. Instead he must gather all the pertinent facts concerning that very town, and quote them by verse and chapter. He must know just how many teachers have been employed during his term, how many of them were normal graduates, how many stayed a second year, what salaries they drew when they moved, and so on. He must show how the salaries paid compare with those in other business places of the town; how they compare with other sections of the state, and what increases must be made to correct the present conditions.

It is rank extravagance for a town to employ a superintendent to train teachers who promptly go to other localities. It is equally extravagant to spend time and money ascertaining that the spelling is not properly taught, or that Miss Jones is weak in arithmetic, or that the 6-A grade is woefully deficient in reading, unless the incompetent teacher can be replaced with one who knows her craft. Let me repeat, even trained and skilled teachers can be greatly improved in the service by careful training and the standard tests are of great value in showing just where the weak places are, and just how great the failure is, but it is nonsense to dwell on this when the teacher has not the skill to correct it, and the town has not the vision to pay enough money to attract and keep a properly trained teacher.

Coming and Going Like Seasons.

Perhaps a concrete illustration will make all this clear. A certain town in Iowa, which we will call Alpha, had fallen into an educational In 1916, which was not so long ago, after all, the salaries of grade teachers ranged from \$45 to \$57, and the high school teachers from \$65 to \$100. Increases of \$2.50, \$1.50 and even \$1.00 per month were common at the end of each year. The total payroll was about \$21,000, and the whole budget about \$35,000. Teachers came and went like the seasons. Normal graduates gained their first year or half-year of training, and then went to better pastures where the financial grass was longer. Pupils dropped out of school pretty rapidly after the sixth grade, so that the senior class of the high school was about one-third the size of the freshman. The course of study was dry and restricted, of course, tho the teaching was better than the town had any right to expect. The general opinion of the public was that "Alpha certainly did have good schools. Yes sir, folks here think a whole lot of education; we believe in good schools."

Obviously it was going to take more than a few Courtis tests or Thorndike scales to correct this situation! The first thing the superintendent did was to gather facts. He gathered the facts about the number of teachers who had been employed during the past four years, and compared them with the number necessary for equipping the schools. In the high school, for instance, he showed that while the regular staff numbered twelve, there had been thirty-seven teachers employed during the last four years, of whom twenty-two had never taught school a day until they started in Alpha. He showed that in one eight-room building there had been twenty-seven teachers, and that the primary room had had five teachers in four years. Then he followed up some of the good teachers who had left, and found what other towns were paying them to do the same work they had left in Alpha. A telling feature was the reporting of some graduates of the high school, who were already earning greater salaries than the teachers under whom they studied! It made interesting reading, especially as all the names were used in full.

The next step was to gather the figures from every town of approximately the same size as Alpha in the state of Iowa. There were 51 of them. When the figures were all recorded, they showed that the average salary paid the superintendent was \$500 more, and that of the high school principal was \$425 more than those paid in Alpha. In grade salaries, it appeared that Alpha stood 49 in a list of 55, and in high school salaries she stood 51. Things like this are a little disquieting to local pride!

Retardation and elimination figures were used, in order to show that the schools were failing to hold and to advance their pupils as they should. Frequent changes and the employment of untrained and inexperienced teachers were frankly assigned as the causes for these conditions. Most of the staff was new, anyhow, so there was no reflection on local teachers, and

those who had gone their way would have been willing enough to admit that they had gained their skill on the hapless pupils of their day.

Value of Publicity.

Having once gathered the evidence, the next thing was to present it to the public. This was done with charts, with outlines and maps, and with bulletins. The local paper was enlisted, and quantities of copy were prepared and published. Meetings were held, and the superintendent appeared before the churches, the lodges, and the clubs. In every case he refrained from generalizing, simply presenting the facts and figures, and commenting briefly on the conclusions to be drawn. Perhaps the crowning achievement was the gaining of an invitation from the Chamber of Commerce, asking the superintendent to give a series of addresses at the weekly lunches of the club. This was done, and the business men were thus fully informed on the situation.

Holding a Loyal Teaching Force.

I need not outline the methods, since every live schoolman knows how to go about such work. Public schools are public news. There is no such thing as too much publicity about the schools, provided it be honest and truthful. It need not be complimentary-sometimes it is better otherwise. But there must be public information, and plenty of it. The outcome of the campaign was that the salaries of the grade teachers are now \$125, and that of the high school teachers \$175. The payroll has been advanced from \$21,000 to over \$53,000 in the four years, and the total budget this coming year is to be \$85,000. The consequence is that teachers in less favored places than Alpha are anxious to get in, and those that are in are anxious to stay in. The increased salaries make it possible for the board to attract superior teachers, who have both the wit and the will to profit by

the showings made in the standard tests and measurements. The increased budget has made it possible to introduce chemistry, manual training and domestic science, together with machine shopwork and printing. The result is that elimination is being greatly reduced, so that the senior class of the high school is only slightly smaller than the freshman. Competent teachers have been secured for the much abused primary room, and the pupils who come to her in the future will have had the advantage of a previous year of kindergarten.

But better than all these things is the awakened and increased public interest in the schools. Instead of taking it for granted that the schools are good, and the teachers are good, and everything is lively, the people are now aroused to the necessity of making these things good, and of spending whatever money is necessary in the process. No doubt some of us will feel that after all \$125 is not a very princely grade salary. No, it is not, but it marks a very considerable advance on \$45, and it paves the way for a still further increase in the future. Alpha is not satisfied, but the best part is that she will not rest until she is satisfied.

Having once provided the means to gain and hold a strong, competent, loyal teaching force, the superintendent is free to employ all the standard tests and measurements his heart desires. He may find that the spelling is wretched, or that the writing is bad, or that the reading is weak. The point is that if he does find these things he has a staff which will stay with him long enough to correct them, a staff which has had enough of pedagogy and psychology to comprehend them, and which has enough of this world's good to be able to apply itself wholeheartedly to their solution, without having to squander its interest and enthusiasm in hunting for a better job!

DETERMINING THE NUMBER OF ROOMS FOR A DEPARTMENTAL SCHOOL BUILDING

Frank Irving Cooper, Architect, Boston, Mass.

The work upon which the Committee on Standardization of Schoolhouse Planning and Construction has been engaged for the past three years is known. Many of you are familiar with the various preliminary reports which have been made at former meetings of the association.

As a restatement of these reports will soon be set before you, it is unnecessary to review them at this time. At this meeting I will show one phase of our investigation which has been undertaken because of many letters which have asked information on the problems which lay before us when one of the many varieties of departmental school buildings was to be planned.

I shall place before you a broad picture of the conditions surrounding the planning of a building of this kind and of the information desired of the educator by the architect before he can knowingly begin the study of the floor plans.

It should be stated that the architect of a successful building must first work out the general floor plans. There is a prevalent notion that an architect works out a picture of his building first. This misconception and misunderstanding of the work of the architect is probably a relic of past conditions. Clients often were in the habit of saying that they wished

their building to resemble some other existing structure which had pleased their fancy and which they thought would appear distinguished in the eyes of their fellows.

This particular habit, once universally characteristic of the well to do, is becoming more and more rare and the client comprehends that the work of the architect is of deeper purport than the working out of a picturesque or monumental building.

The problem of the architect under present conditions requires first a mind trained to distinguish the fundamental principles upon which a successful plan is based; second it requires a knowledge of the infinite variety of detail that must be worked out and incorporated in the several distinct parts of the plan: third it requires an understanding of the particular portion of the work of instruction that is to be carried on in each part of the completed building.

I said I would put before you a method of planning a departmental school building. I shall take a small departmental school of a type with which you are all familiar and show you what questions the architect would put to the superintendent in order that the plan of the building will meet the requirements of the particular work of that school.

The process of educating for the needs of today and tomorrow in the departmental school is dependent to a great extent upon the planning of the school building and conversely the plan of the departmental school building is dependent upon the character and extent of the various activities which the school is to provide for its pupils.

It follows then that a complete analysis of the activities of the proposed school must be made with reference to present needs and to future needs in so far as they may be foreseen when the building finally houses the total number of pupils for which it was planned. This analysis, which should be made by the educational authorities, will give the basic data which is needed by the architect; with this in mind he will rear his edifice.

The first question the architect will ask after he has been engaged to prepare sketches for a new school building will be: How many pupils is the building to accommodate? And here is a chance for a difference of opinion. Differences often happen when more than one mind is dealing with a subject, and there is more than one way in which this question of accommodation may be considered.

When working out the size of a school building some educators and architects consider and tabulate the number of pupil stations in a building rather than the exact number of pupils. Some call only a seat and desk in a classroom a station, others would call a pupil's place to work in a shop, laboratory or drawing room a station. Likewise they would consider an opportunity for work in a gymnasium, swimming pool or a seat in an auditorium a station.

There are some people who demand a class-

Editor's Note—The present paper was read before the Department of School Administration of the N. E. A. at its annual meeting July 7, 1920, in Salt Lake City. The author is chairman of the Committee on Standardization of Schoolhouse Planning and Construction of the N. E. A. and is without question the leading researcher in scientific schoolhouse planning in the United States.



AMESBURY HIGH SCHOOL, AMESBURY, MASS.

Prescott & Sidebottom. Architects. Boston. Mass.



FLOOR PLANS OF THE AMESBURY HIGH SCHOOL, AMESBURY, MASS.

room seat for every pupil in the school, likewise an anditorium seat for every pupil in the school, also a seat in the study hall for the entire school enrollment, and in addition to this a place in the gymnasium, shop, cooking room, drawing room or laboratory for every pupil attendant at the school. This makes four stations for each pupil, consequently three places will be vacant all of the time.

It is unnecessary for us at this time to discuss or consider the line of argument that has been advanced for any of these methods of calculating the capacity of a school building.

We simply desire and insist that before any planning of the school building can be undertaken the architect and educator and building committee must understand and be in agreement as to what is meant when they say the building is to accommodate so many pupils.

For some time the Committee on Standardization has realized from its study of school plans that in many parts of the country certain factors have combined to prevent a pupil having more than one station provided for him in the public schools.

In most cities and large towns of the country lack of money and the difficulty of continuing building operations have prevented the erection of schoolhouses in sufficient number to keep pace with the increase of pupils.

Leading statisticians state there is sound reason for the belief that in the growing parts of the country financial consideration alone will for many years prevent the providing of sufficient school accommodations if these be reckoned by any other method than that of one station per pupil.

It is in consequence of these facts which will be appreciated by any student who will investigate present housing conditions in our public

schools, that we are brought to the conclusion that multiple stations or even single home desk stations can no longer be provided for pupils beyond the reach of the public purse. It is indeed obvious to any student of school housing that what may be termed the passing of the home desk, is already taking place in many parts of the country.

Financial considerations and the present day reorganization of our school system, changing gradually from the one teacher regime to the system of special teachers with its accompanying departmentalization of work, demand changes in the organization and administration of the school world that is already reflected in the plan of the school building.

It is a fact that a review of this past year's new schoolhouse plans shows wider variations in form and type than has ever before been observed in the same period of time.

The architect's next questions will be about the grades that will be in the school and the probable number of pupils in each grade, the subjects to be taught, the probable number of pupils that will take each subject, the maximum number of pupils per teacher in each subject, the length of a period, and the number of periods per week for each subject.

It is necessary to have information as to grades because in the work of the school, pupils are divided by grades, altho promotion is largely by subject.

The probable number of pupils in each grade is required in order to have a maximum number from which to start in determining the number of classes or sections required in order that all pupils in a grade may have an opportunity of taking any particular subject.

For this reason information should be given as to the subjects to be undertaken. The maxi-

mum number of pupils per teacher for each subject and the probable number of pupils who will take each subject, determines the necessary number of classrooms planned for that subject.

In working out the tabulation for number of rooms each subject is considered separately and and the total probable number of pupils taking the subject is divided by the maximum number of pupils allowed per teacher for that subject.

Information is next requested on the number of periods per week that will be given each subject and the length of each recitation or study period so that each class or section may be provided with a suitable room for that period.

Special activities are treated in the same manner and the periods taken by them are to be tabulated as any other work.

This information gives the architect a fairly clear idea of the work to be carried on in the school building and provides him with a safe guide to point out the activities for which it is his duty to provide suitable accommodation.

The engineering problems and the financial considerations, both part of the architect's work, we may omit.

For the purpose of this paper we may consider it is agreed that each pupil in our school is to have the equivalent of one book locker or station that shall be set apart for his personal use and convenience, in other words, he is to have a place that he may call his home station, and each pupil taking a special subject, such as chemistry or domestic science, shall have, convenient to the room where this subject is given, a special locker or drawer to contain his material to be used for that subject.

Also for the purpose of this paper we may consider that the architect has received from the superintendent precise and satisfactory in-

MASSACHUSETTS BOARD OF EDUCATION

OFFICE OF THE BUSINESS AGENT

GRAPHIC COMPARISON OF AREAS IN RECENT . MASSACHUSETTS HIGH SCHOOL BUILDINGS

| SQ FT 6779 | B 6 39 FT 100% | 54039 30 FT 100% | 3961 3 50 FT | 42894 SQ FT 100% |
|--|----------------------|---------------------|---------------------|---------------------|
| 9.62 % OUTSIDE WALLS INTERIOR PARTITIONS | 10.70% (ONSTRUCTION | 956% | 10.82% | 9.00% |
| 637% HEAT & VENT FLUES | 0.61 10 | | 3.75% | 4 90% |
| 17.08% STAIR HALLS CORRIDORS PASSAGEWAYS | 2076% CORRI | 1946% | 17.70% | 1360% |
| 9.21% GYM LOCKERS & SHOWERS LUNCH & PLAY ROOMS | 5.16% SSOVIE | 316% | 736% | 1.67% |
| 45.64% CLASS ROOMS STUDY ROOMS RECITATION ROOMS COMMERCIAL ROOMS ART DEPARTMENT LABORATORIES LECTURE ROOM DOMESTIC SCIENCE MANUAL TRAINING SEWING MILLINERY ASSEMBLY HALL LIDRARY GYMNASIUM SWIMMING POOL | 46.44% | 51.85% | 51.22 % | 58.32% |
| 12.06% Sea% SHEATING PLANT STORE ROOMS ETC. JANITOR ETC. | 13.73 % 5.26% | 12.96% { 5.29% | 15.15 % { 6.60% | 13.51% { 5.44 |
| 185% TOILETS 3.00% WARDRODES | MAN 2.74 % | 2.37% | 2.75% | 340 |
| 1.54% OFFICES ETC. | MI 3.71 % | 2.82% | 1.70% | 273 |

CHART TO SHOW VARIATIONS IN SPACE DIVISIONS IN FIVE MASSACHUSETTS HIGH SCHOOLS.

formation that informs him as to the number of grades, the estimated number of pupils to be in each grade, the subjects to be taught, and the estimated number of pupils taking each subject. I refer to the superintendent of schools because the superintendent is the person to whom the questions should be addressed and because it is desirable and advantageous that the superintendent should be a member of the building committee.

Also the superintendent, the school committee and principal have conferred and agreed upon the maximum number of pupils a teacher in their school system will be called upon to teach in a class or section; they have fixed the number of periods there will be in the school day, the length in minutes of each period, and the number of school days per week.

Few matters are more familiar to you than those mentioned in the above outline, but questions from the architect relating to these matters are not answered without difficulty and until they are answered in detail the proper planning of the new school building cannot be carried on, and any determination of number of rooms made by the superintendent and architect without making analysis of the school population, will result in a school building based on guess work.

Before we take up the determination of the number of rooms required in our school building we should consider some of the many general points that will confront the architect while he is laying out the plan of his school building.

The question of the multiple use of rooms will need much consideration before a proper analysis of the requirements can be concluded. Rooms, whenever possible, should be so con-

structed that they may be used continuously and may be used for different purposes at different times.

It is evident that the same rooms may be used for the study of civics, language, general science or mathematics; that the library may be used for study, recitations or conferences; biology and agriculture may be taught in the same room; the bookkeeping room may be used for study or recitations; domestic arts rooms may be used for recitation or sewing; the lunch room may be used for study; and there are other duplicate or multiple uses for school-rooms too numerous to mention.

It is sound economy when about to erect a school building to calculate as far as possible and plan for the future; we are dealing in futures when we work with and for school children, and schoolrooms so planned and constructed that they may be used for other purposes than that for which they were first intended to be used, enlarge the possibilities of the school building and are more likely to fulfill the requirements of the future.

The school building may be constructed so that it may serve the unknown requirements of the future if we so construct the interior of the building that the space arrangements may be readily changed.

The usual public building (and school buildings come under this class), is erected with ita interior walls of solid masonry. They are in most cases supporting or bearing walls and they cannot be changed without great expense and with vexation not only to builders but to the users of the building, who when changes are made, must needs vacate the premises tor n

considerable period while the workmen first wreck and then rebuild.

I use the term "cast iron construction" for this class of building and hold that as the construction of a school building of all buildings should be flexible and be able to lend itself to the changing requirements of progress, its interior parts should be so constructed that they may be changed with the least possible disturbance both to the building and to its occupants.

Now that we have offered some of the general observations that may be made on planning the school building let us pass on to what method may be devised by which we may be guided in determining the number of rooms the school building should contain.

In this work we have been greatly aided by Mr. Clarence D. Kingsley, Agent for High Schools of the Massachusetts Board of Education.

Mr. Kingsley suggested that instead of first endeavoring to determine the number of classrooms required, that classrooms be the last rooms to be considered and the number of special rooms be first determined.

With this method of computation of necessity the pupils' home station becomes a place where his school possessions are kept, and we no longer are held to the number of home desks as giving the total capacity for the building. Total capacity now means the total number of children that can without interference one with another, pursue their studies and other school activities on the school premises with the greatest profit to themselves.

In the preceding paragraphs I have given you an account of the information the architect

CHART FOR COMPUTATION FOR THE NUMBER OF ROOMS NEEDED FOR INSTRUCTION PURPOSES IN A SCHOOL BUILDING BASED ON ONE WEEK'S PROGRAM

| | TURTUSLS | 11 / | 10 | 101 | ICC | 1 | | ILL | Ulli | 10 | V | UNI | .0 | OI | 1 0 | INL | | LLI | 1) | rk | 0 | UR | MII | 11 | | | | | |
|---------------------|-------------------|----------|------------------------|---------|----------------------|------------------|----------|------------------------|------|-----------|------------------|----------|------------------------|------------------|----------------------|-------|-----|------------------------|---------------------|----------------------|-------|---------------|---------------------------------|-------|-------|--------------------------|--------|---------|------|
| | | FIF | 957 | Y | EAR | ? | SE | CON | DY | EAI | P | TH | IRL | O Y | EAR | 7 | FO | URT | TH Y | EAF | P | | 707 | AL. | S | | | | |
| | | A | B | C | D | E | F | G | H | 1 | J | K | 1 | M | N | 0 | P | Q | R | 5 | T | U | V | W | X | Y | | | |
| FORMULA - | - | | | A | | CXD | | | E | | HXI | | | K | | MXN | | | 8 | | RXS | E+J+ O+T | | 4 | MHU | W-X | | | |
| SUBJECT | DUPLICATE USE | STUDENTS | MAX SIZE OF CLASSES | CLASSES | ALLOTMENT PERIODS | CLASS PERIODS | STUDENTS | MAX SIZE OF CLASSES | | ALLOTMENT | CLASS PERIODS | STUDENTS | MAX SIZE OF CLASSES | CLASSES REQUIRED | ALLOTMENT PERIODS | CLASS | 0 | MAX SIZE OF CLASSES | CLASSES REQUIRED | ALLOTMENT PERIODS | CLASS | CLASS PERIODS | USABLE CLASS PERIODS PER WK. | ROOMS | SPARE | ACTUAL ROOMS REQUIRED | SINGLE | PERIODS | |
| | | | | | | | | SP | EC | IA | 1 | RO | 001 | 115 | | | | | | | | | | | | | | | 9 |
| Home Economics Gen. | | 64 | 24 | 3 | 2 | 6 | 48 | 24 | 2 | 1 | 2 | 35 | 24 | 2 | 1 | 2 | 24 | 24 | 1 | 2 | 2 | 12 | 15 | 1 | +3 | 1 | | X | |
| " . " Voc | Recitation | | | | | | 36 | 24 | 2 | 1 | 2 | 18 | 18 | 1 | 1 | 1 | 18 | 18 | 1 | 1 | 1. | 4 | 15 | 1 | +// | 1 | | X | |
| Woodworking | | 50 | 20 | 3 | 3 | 9 | | | | | | | | | | | | | | | | 9 | 15 | 1 | +6 | 1 | | X | |
| Printing | | | | | | | 36 | 15 | 3 | 3 | 9 | | | | | | | | | | | 9 | 15 | 1 | +6 | 1 | | X | |
| Mech Drowing | | 80 | 20 | 4 | 1 | 4 | 50 | 20 | 3 | 1 | 3 | 20 | 20 | 1. | 1 | 1 | 20 | 20 | 1 | 1 | 1 | 9 | 15 | 1 | +6 | 1 | | X | |
| Free " | Recitation | 60 | 18 | 4 | 1 | 4 | 60 | 18 | 4 | 1 | 4 | 40 | 18 | 3 | 1 | 3 | 30 | 18 | 2 | 1 | 2 | 13 | 15 | 1 | +2 | 1 | | X | |
| MUSIC | | 250 | | | | | 175 | | | | | 125 | | | | | 100 | | | | | | | | | 1 | Aug | itor | um |
| Phys Training Boys | | 100 | 60 | 2 | 1 | 2 | 80 | 60 | 2 | 1 | 2 | 45 | 60 | 1 | 1 | 1 | 30 | 60 | 1 | 1 | 1 | 6 | 15 | 1 | 4.1 | , | Com | nnos | |
| " Girls | | 120 | 60 | 2 | 1 | 2 | 100 | 60 | 2 | 1 | 2 | 80 | 60 | 2 | 1 | 2 | 70 | 60 | 2 | 1 | 2 | 8 | 13 | 4 | +1 | 1 | l Oyn | 77703 | , on |
| | | | | | | | | LA | 4B0 | OR | ATO | PRI | ES | | | | | | | | | | | | | | | | |
| General Science | Recitation | 140 | 35 | 4 | 5 | 20 | 105 | 35 | 3 | 5 | 15 | | | | | | | | | | | 35 | 35 | 1 | | 1 | X | | |
| Chemistry | | | | | | | | | | | | 40 | 30 | 2 | 8 | 16 | | | | | | 16 | 35 | 1 | +19 | 1 | X | X | |
| Physics | Recitation | | | | | | | | | | | | | | | | 30 | 30 | 1 | 8 | 8 | 8 | 35 | 1 | +27 | 1 | X | X | |
| | | | | | | | (| ON | MME | RC | IAL | RO | ON | 15 | | | | | | | | | | | | | | | |
| Bookkeeping | | 80 | 35 | 3 | 5 | 15 | 80 | 40 | 2 | 5 | 10 | 65 | 40 | 2 | 5 | 10 | | | | | | 35 | 35 | 1 | | 1 | X | | |
| Stenography | Recitation | | | | | | | | | | | 60 | 42 | 2 | 5 | 10 | 40 | 42 | 1 | 5 | 5 | 15 | 35 | 1 | +20 | 1 | X | | |
| Typewriting | Recitation | | | | | | 60 | 42 | 2 2 | 5 | - | - | - | 2 | 5 | 10 | 40 | 42 | 1 | 5 | 5 | 25 | 35 | 1 | +10 | 1 | X | | |
| | | | | | | A | RECI | ITA | 710 | NE | 5 C. | 445 | 55 | PO | SW | 5 | | | | | | | | | | | | | |
| English | | 250 | 0 42 | 6 | 5 | 30 | 165 | 1 | _ | 5 | 20 | 125 | 42 | 3 | 5 | 15 | 100 | - | | 5 | | 80 | 35 | 2 | -10 | | X | 1 | |
| History & Civics | All rooms may be | 160 | 142 | 4 | 5 | 20 | 40 | 1 42 | 2 1 | 5 | 5 | 50 | 42 | 2 | 5 | 10 | 60 | - | - | 5 | 10 | 45 | 35 | 1 | -10 | 833 | 5 X | | |
| Mathematics | used in duplicate | 160 | 1 42 | 2 4 | 5 | 20 | 80 | 42 | 2 2 | 5 | 10 | 40 | 42 | 2 1 | 5 | 5 | 30 | 42 | 1 | 5 | 5 | 40 | 35 | 1 | -5 | | X | | |
| Foreign Languages | | 100 | 20 | 5 | 5 | 25 | 20 | 0 20 | 0 10 | 5 | 50 | 120 | 20 | 0 6 | 5 | 30 | 20 | 20 | 4 | 5 | 20 | 125 | 35 | 3 | -20 | | X | | |
| | | 1 | 1 | | I | - | - | 1 | 1 | | | 1 | - | 1 | | 1 | L | 1 | 1 | - | 1 | 1 | L | 1 | | | 1 | 1 | - |

needs for data upon which he can base his calculation to determine the number of rooms that will be required to provide each teacher and each pupil a place in which may be carried on study, recitation, special activity, or recreation, that is allotted by the program to that period.

We are now prepared to consider an actual building and I have asked Mr. Prescott, an architect of Boston, to allow me to show you the plans of a very successful small high school which he designed and which was erected just before the war.

The building which is shown by Illustration I is beautifully placed on a site some eighteen acres in extent in the town of Amesbury, the home town of the poet Whittier. The floor plans of the school are shown just below the picture of the building so that we may easily see and comprehend the entire structure.

This high school building of Amesbury was one of the five buildings selected by the agents of the State Board of Education for our Committee to tabulate.

Illustration No. II shows the chart prepared at that time and per cent divisions of the Amesbury building is shown by Candlestick C.

You note that the building contains rooms for

Printing
Manual Training
Gymnasium
Domestic Science
Domestic Art
Mechanical Drawing
Free Hand Drawing
Bookkeeping
Stenography
Typewriting
Physical Laboratory
General Science

Library

2 Study Rooms

4 Classrooms

2 Recitation Rooms

The superintendent should tell the architect how many pupils, in each grade, will take each subject, and for how many single or double periods per week and from this data the architect must work up the number of rooms needed for each subject.

Illustration No. III shows how the architect might lay out a chart from the data received from the superintendent. You will note there are 64 plus 48 plus 35 plus 24 pupils taking Home Economics. The architect's problem is to determine the number of rooms necessary for this subject.

First. Divide the total number of pupils taking a subject in one grade by the maximum number of pupils given one teacher. (If quotient contains a fraction, treat the fraction as an additional unit.)

Referring to the chart, 64 students of first grade take home economics, the maximum number of pupils given to one teacher is 24. Divide 64 by 24; this gives 2 16/24 classes.

In practice 64 pupils will be divided into three classes and the fraction will have been set down as an additional unit, making 3.

Second, Multiply this quotient by the number of subject allotment periods. This gives the number of class periods of a grade per week. Find the class periods per week for pupils of each grade. Add the class periods of all the grades and divide their sum by the number of usable periods per day per week. This gives the number of rooms required by all grades for one subject in one week.

If this number is a whole number this gives the number of rooms required for the subject.

If the number is a fraction the numerator shows the number of periods during the week in which one room must be given to this subject and the difference between the numerator and denominator shows the additional periods in which the room may be used for some other subject. We express this as a unit plus the additional periods.

If the answer is a mixed number the whole number shows the number of rooms which must be used thruout the week for this subject and the numerator of the fraction shows the number of periods that an additional room must be used for this subject. We express this as a whole number minus the number of additional periods.

Referring to the chart 48 second-year pupils with allotment period of one require two class periods. Thirty-five third-year pupils with allotment of one require two class periods. Twenty-four fourth-year pupils with allotment of two require two class periods. Add class periods 6 plus 2 plus 2 plus 2, gives twelve class periods; divide by number of periods per day multiplied by periods per week, 3x5 or 15, gives 12 15; twelve, the numerator, shows that one room must be used twelve periods during week for home economics and the difference between numerator twelve and denominator 15, shows there are three additional periods during which this room may be used for some other subject, indicated on chart by 1 plus 3.

Considering English, 250 first-year pupils require 30 class periods, 165 second-year pupils require 20, 125 third-year pupils require fifteen, 100 fourth-year pupils require fifteen; divide their sum 80 by 35, the quotient is 2 10/35; this shows two rooms must be used thruout all the periods of the week for English and in addition ten periods must be given from the time of an

(Concluded on Page 100)

PROPER RELATIONS OF HELPFULNESS AND CO-OPERATION AMONG SUPERINTENDENTS

Avis

Part II

A superintendent has a certain amount of energy, which may be changed into power to do just so much work in a given time. Part of this is spent in lost motion or friction—time-killing trifles incident to keeping the schools running, holding things together, or seriously fighting the forces that hinder school progress. Part of it (if there be any left) may be used in really constructive work—building, advancing, improving, discovering. Whatever reduces the lost motion outlay and increases the constructive outlay is a help.

Strong superintendents have had to fight almost alone the battles for better schools. Stopped, or almost stopped, by the demands of lost motion upon their activities, they either have no power left for the second kind of work or maybe we hear only now and then of some constructive labor one of them has had the strength to put over. What an appalling loss to the state has been the really effective work they could have done each year, if only the constant hindering forces had been prevented from turning it into friction and lost motion!

There enters this the psychology of numbers. Even with five good board members, all friendly, it takes a strong superintendent to lead a meeting so that no technical mistakes are made.

A single man seldom gives an able superintendent much trouble. But two, three, or more hostile men on his board, two or six parents of incorrigibles, two or six relatives of a teacher who failed of election, two or a dozen taxpayers with a grouch or with an axe to grind-tho in the wrong, their sheer numbers enable them to use up all of a lone superintendent's time and energy if they fail to throw him, and even frequently to dominate the situation and cause his fall. His loss may be his position; or it may be good order in the schools, efficiency in teaching, a new building, an expert teacher, a decent salary. Nobody is able to see that the town's loss is greater than his. His enemies are the town's enemies, but they are allowed to harass him in an unequal fight.

No honest superintendent can escape accumulating a collection of enemies. Whenever he opposes the election of a teacher with friends or local relatives, drops a teacher from his force, expels a student, or breaks up a graft, he has made at least one lifetime enemy and usually several. His teachers and board make some, who shift their hostility to him. Most of these fight the schools all the time and the superintendent every time they see any chance for success. It is only a question of time until any active superintendent will accumulate enough enemies to cause his loss of position, under ordinary conditions. The town is complacent while a small minority destroy the usefulness of their school head and damage their schools more and more. All too frequently there is scant protection for the man who bore the burden of the fight for The loss in good schoolmen and in good schools has been heavy.

Wolves and Norway Rats.

In a few instances at past state association meetings it has been enough to sicken the soul when some fellow who likes to tote news spreads gossip that "So-and-so has lost out at Smithtown," and to watch the injured superintendent, and to note the others who are after his place. Wolves and Norway rats, when one of their

number falls in a fight or a race, finish him off and then dine upon his carcass. More intelligent animals carry away their wounded comrade, give no voice of his fall, reinstate him elsewhere, or even turn and fight for him, without thought of profiting by his vacant place. Even mules, when hard pressed by hostile numbers of wild animals in the jungle, have the judgment if not the ethics to put their heads together and turn their heels toward the common enemy at the outer edge of the circle.

Fortunately, in the writer's state, we are now almost free of schoolmen who have the ethics of the Norway rat. It has been a joy to note the way practically every superintendent in the state did his bit to help his fellow out, in several towns where we knew a good schoolman had been treated unfairly. That is one reason the superintendents of this state are worthy of every schoolman's respect and affection. It has also been a joy to see the fine contempt with which they regarded boards that had been tricky or arbitrary, and their refusal to apply or to have anything to do with such places.

But such action, while widespread, has been individual. Each man did what he could by himself, by writing or wiring the offending boards. Hence we did not get under their hides, in every case. Had the superintendents been united, they would have been powerful. Such boards have little respect for anything except power; they may laugh at the helpless man who has been dropped, and remain unshaken in their belief that others will come toadying around after his place. The new applicants discover what sound principle of school practice it was that caused the rupture for the loser, and speedily condemn it. They are prepared to favor the square system of teaching geography if that will please the trustees. Anything to curry favor; anything to get the job; any disparaging remarks about their fellow applicants if opportunity comes; any salary that suits the board. What wonder that contempt is brought upon the profession!

There is absolutely no successful business that has failed to grasp and use the idea of cooperation and that of the psychology of numbers. A railway engineer has with him one or more of his peers when he "goes on the carpet" before the several officials of the road. The accompanying engineer may have a different viewpoint, but his presence is conceded as a right and insures a fair and respectful hearing. The accusing board knows that behind the lone engineer is every engineer in the state, or even the country, to approve every judgment of theirs if he was to blame, or to fight and nullify every act of theirs which would do him injustice. Those engineers know more about running locomotives than any men on the board, and personal whim or hostility in the official board cannot make anything stick that is contrary to the best railroad practice as known to these engineers and all their fellows to whom they will report the results.

Protection Against Injustice.

Engineers must bear enormous responsibility in their daily work, and if efficient must be protected from harassment by irresponsible persons while doing that work, from malicious tampering with the engine or track, and from unfair tricks inspired by personal enmity or

any other motive on the part of any or all of the officials who employ them. We do not know whether engineers use their powerful committees merely for protection in cases of grievances, or whether they also use them for constructive work and send them to road officials in the interest of better transportation. But we do know that such cooperation among school superintendents would justify its existence by devoting its activities almost entirely to constructive work, for the good of the schools, the children, and the state.

As to a committee of schoolmen, working upon the affairs of any certain state: Such a body of schoolmen would be intended for constructive work and would so function most of the time. Only incidentally would it be protective to an individual schoolman, and then not so much for the good reason that he was harmed by injustice, but for the good reason that the schools were harmed since they were so closely identified with him and injury mutual.

Its very existence would be a powerful deterrent to friction, inefficiency, and injustice on the part of schoolmen on the one hand and board members or citizens on the other. One man may attempt a mean trick against a lone man or in a small circle of control safe from publicity, but he will hesitate to buck against a powerful statewide organization which has freedom of action, unimpeachable standing, authority of numbers, limitless powers of publicity, no point at which it may be intimidated, and a certain uncomfortable habit of judging every matter fairly on its merits and its broad bearing upon the schools.

There have been towns that have suffered because of worthless or inefficient superintendents. Mostly these were men who should never have been in the profession at all, poorly prepared, deficient in the broad special knowledge necessary for such an administrative position, elevated to office by accident or hook or crook, players of politics. Sometimes they undermine their superior, or slip into office during an upheaval when he loses the place.

Pedagogical Norway rats come from other less desirable town superintendencies, from county superintendencies, from principalships in the loser's own schools, from the ranks of the has-been and the old field school, from habitual officeholders and small-fry politicians, town loafers and ne'er-do-wells. They get in thru some interest or other that can control them thru relatives, friends, politics, lodges, and even churches or anything that can be used inno-cently or otherwise. They spend much time strengthening their hold and making friends. They are "mixers" from the word go, and usually hot air artists. Their lack of education, and ignorance of modern school problems, cause despair to what few good teachers remain in their schools. They range all the way from likable weaklings to shams and frauds of the worst type. Some of their points are desirable (lodge and church membership, for instance) or even essential, but of such nature that they may belong to any and all men, regardless of whether they have any talent and qualifications for a school superintendency or not. Some of these may be good men in every respect, but they know very little of schools. There are thousands of good men everywhere, but we do not elect them to be locomotive engineers simply on their piety or their popularity. What was said of locomotive engineers applies also to construction engineers and superintendents of large industrial developments, the analogy being perhaps even better.

School Rows Harmful.

School rows are always destructive. Towns have not been able to get rid of undesirable superintendents without an uproar, sometimes not even with one. Their tentacles are extensive. They hang on, because it is hard for them to get another position on merit. Frequently when dislodged, they stay in the town and make trouble on the sly for the new superintendent, while their friends fight the schools. The profession itself has not been able to get rid of all such men.

The majority of the members of the majority of school boards, and all the members of many school boards, are splendid men of the finest type. They know that a certain move or improvement should be made, but are handicapped by conditions over which they have no control and are unable to carry out their wishes without stirring up more trouble than it would be worth. They would welcome the services of an able body which could not be misled. The undesirable man would be disposed of, or the school problem solved, without any flareback. Superintendent, principal, teacher, board member, or citizen, if an impediment to the schools, would quickly find himself powerless for further mischief.

This idea of a body of schoolmen is only suggestive. We must stop the waste of working alone. It is hoped that others wiser than the writer will work out the best plan and details. These are immaterial, so we get the results. But if there were some kind of executive committee of superintendents, having behind them the prestige and authority of all the heads of schools in the state, and if possible that of all the teachers and the Department of Education and the colleges, its power for good would be enormous. This committee could act normally in initiating, collecting, encouraging, passing upon, and pushing to success constructive school measures. It could gather and distribute information. With the help of the profession, it could settle upon concerted action on points of school improvement, and then make that action possible, in its

Its approval and support of any kind of improvement, anywhere, would give great help to superintendents, boards, and public-spirited citizens who were attempting it. Its disapproval would stop any piece of unwise legislation touching the schools, should ignorance and politics start it. Its support would aid wise state legislative measures. (Many schoolmen think we must look more to improved legislative measures, to remedy conditions, lengthen the tenure of office for superintendents, and curb destructive agencies.)

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It should represent the body of accumulated school knowledge such as is endorsed by the more enlightened of the profession and recognized as sound, standard, modern school practice. It should stand for right, justice, and impartiality. It should strip matters of every beclouding issue. It should make surveys when needed, and advise upon matters submitted. It should be composed of able men who will stick till they see a matter thru. It should be free of politics, and hampered by no unwise laws creating it. It should be the ideal and supreme contribution to service of the men composing it. Such bodies have been created successfully in the medical, scientific, and technical professions, to the great good of humanity. They have had the courage to discipline weak members of their own profession, even.

A Committee on School Legislation.

The body could act with or thru or by direction of the State Department of Education. Officers of the latter might be members of it, or ex-officio members, or free of it, whichever would serve their purpose best. That department is legally charged with working for many of the same things and does so quite well. It can handle by law many matters the proposed body could not. But it is limited by some of the very laws which created it, and undoubtedly a professional body without legal standing can do much desirable work that the state department cannot, in a large field which would not encroach upon the latter's.

The state teachers' association is one example of such a body. The proposed committee should be very closely related to the state teachers' association, or perhaps a part of it. It should be free of the legal limitations of the state department and of the cumbersomeness of the teachers' association. Advisor, leader, servant, follower, mouthpiece, or independent ally, its act would be enforced not by law but by professional sentiment. It should be an effective instrument, to serve the profession and the schools, and to exert their strength collectively when necessary.

I've just been back to the old home, John,
To the house with its gables gray.

And the roses were tangled about the door
In the same sweet-scented way;

And the old stone wall in the meadow-lot,
Still winds on its way toward the mill,
But grass is grown on the path that leads
To the schoolhouse, on "Butternut Hill."

The little brick schoolhouse we loved so, John, Still stands 'neath the butternut trees;
But the battered door, where we carved our names.

Swings idly in the breeze.

I saw your name, and Margaret's too
Just as you put them there;

Dear little playmate, asleep long since,
Wrapped in her sunny hair.

I lingered long 'neath the willows, John,
That bordered the swimming pool.
Do you remember the many times
That it made us late to school?
Could I choose, I'd live them over again,
Those days with the old sweet thrill;
In the place that we loved the best of all,
The schoolhouse on "Butternut Hill."

It sits alone in the sunlight there,
Half buried in golden-rod;
And over its broken window frames,
The wild pink roses nod.
I lingered there till the sunset, John,
Fell over its worn old sill,
And turned its windows into gold,
As I went down the hill.

Only the ablest and most consecrated men should compose it; men who can forget self and look for no reward but the satisfaction of service.

Superintendents were suggested as members only because of their larger grasp of all sides of school matters, the fact that after all the affairs of teachers and public have to be entrusted to them, the certainty that the initiative for improvement of the state schools is with them, and especially because the enormous responsibility for the success or failure of the schools rests upon their shoulders whether they wish it or not. It is unfair to have great responsibilities without great power; these responsibilities themselves guarantee the wise use of such power. It might be that one body would do, or that because of their peculiar problems the county superintendents or agricultural high school men would need a separate cooperating body or separate part of the same body.

Possibly county superintendents and agricultural schoolmen do not feel the need of this body,

at least for protection, as much as town mendo. A wag stated that a county schoolman in the writer's state never had any troubles unless the aspiring principal of Poplar Creek Consolidated School took a notion to run for office against his superior, or the neighborhoods of Bethesda and Mount Hephzibah took a notion not to consolidate into the New Union School unless it should be built in both places. The same wag is authority for the statement that the agricultural schoolmen are absolutely free of troubles, and not even concerned about the high cost of living.

Seriously, they may not have as much annoyance as the town men, because their public is scattered out on the farms and is busy. Certainly they need the constructive work of such a body in the state to which he referred, if only to help get the county superintendency out of politics, so the county superintendent won't have to "run" for office.

Our politicians refer to any state's great school system as "leading," but neglect to say in which direction. Other methods of constructive work must be tried, than the past ones which have made such a showing.

A Clearing House for Trouble.

Besides constructive work, the committee could act as a clearing house for trouble. Indirectly, this would also be constructive work. Its effects would be constructive. In a dispute between a superintendent and his board, carried up by either party, he would be judged by his peers whose collective school knowledge is greater than his, they by fellow servants working for better schools, whose collective information is greater than theirs. Its cool judgment should be superior to that of either party and free from personal feeling. Each side could submit its case in writing, or the committee invited to the town. Adjustments would be easy. Decisions could be given only to the parties concerned; or, if of service to others, a digest of the evidence and findings and opinions could be given to the press and mimeographed for mailing to the superintendents and school boards of the state.

As it is now at a disagreeable meeting, the superintendent and his board stand one to five in numbers; he has the authority of one and his service, while they have the authority of five and his job. As it should be, the superintendent, if in the right, would have the authority of several thousand school people and his job; the board, if in the right, would have exactly the same authority of several thousand and the job. Equal power and standing make for equal and mutual respect. Personal whim or prejudice cannot then have its mischievous way.

The power of this committee would be a moral one, based on its tendency toward service, school wisdom, and righteousness so far as board and public are concerned. With the profession, its power would be that of professional public opinion and ethics. Such power is much greater than that given by the state laws. Its only difficulty has been that heretofore it has never been formulated, concentrated, organized for use as an instrument.

Even if a good superintendent should be ousted, in defiance of this body's backing, he would not suffer professionally; instead of humiliation, a high place in the association and a better position in some other town would await him. The state press and metropolitan dailies would have the committee's authoritative digest of the whole matter, and to make the effect more thoro, mimeographed copies would travel to every superintendent and school board in the state. No crooked board could meet such methods. The exposure would put the blame right where it belonged and the local public

would repudiate the culprits and change the personnel of the board. In fact, resignations would come right along from such members, as a result of the dose. Other unworthy board members in the state would stay shy of tricks that offered any possibility of getting them into similar trouble. Tenure of office on a board would become more uncertain than that of a superintendent is now, and undesirable men would not want to be members. There would be nothing in it for them.

It is certain that this body could cause the entire profession of the state to avoid any town which permitted unfairness to a good superintendent or teacher, or failed to support its schools by right sentiment and good salaries, or tolerated a sorehead element which nagged at school affairs to their hurt. Such discipline could be kept up until inability to get teachers and the effects of unpleasant advertisement forced the people of the town to remove such persons as were the cause, clean house, and convince the profession of fair play thenceforth. But as a matter of fact, such miscarriage would not be permitted. Partisanship, politics, grafting, self-seeking, crookedness, personal spite, ignorance, misrepresentation-whether in citizen, board member, or one of the supervisory or teaching force-would run to cover at the prospect of exposure to pitiless publicity and indignation by the power of the committee.

Cooperation and High Ethics.

At present there is only one man in each town who can be counted on with certainty to fight such evils, a good superintendent. He is not always able to do so successfully. He is not always able to expose school enemies and impediments, or an element that will not support the schools. He is not always able to combat the collective influence of the inefficient instructors, the trouble-making teachers, the worthless students, the foolish parents, the hostile board members. Such gentry are many to his one; they are busy all the time in mischief, while he has to work at the school job too hard to spare time for fighting them.

The writer feels free to discuss these unpleasant matters, because they are not personal just

now. It is a genuine pleasure to say a word of appreciation of five splendid men whom he believes to be the best school board in his state and of a town citizenship where the associations have been so delightful to him. These have backed the writer with their courtesy, their help, their brains and their money for salaries.

One of the first duties of the proposed committee would be to insist upon higher and higher standards of character, collegiate training, special equipment, knowledge of modern school conditions and practice, and professional ethics, for the superintendent himself.

Good standing with this committee would be a valuable asset for applicants, and the lack of it would justify boards in denying consideration of the applicant. For the committee would be the collective professional opinion of the state. To it boards and superintendents could forward letters written direct to a board in the effort to get a superintendency without first writing the incumbent, inquiries of the same sneaking kind, or any violations of professional ethics that came under their notice, for publicity. This body should combine all the advantages of cooperation and high ethics, without the disadvantages of unionism to either side.

Such committee would do immense constructive work, impartially and patriotically. Without effort on its part, its very existence would be the cause of protection. It would make a resultful fight against everything, within or without the profession, that opposes or hampers the schools.

If this disconnected paper has shown our needs and outlined an ideal, and has touched upon various matters that are suggestive enough to set the ablest minds to working out in any state a plan and details, the writer will feel that it has accomplished its purpose.

We can help each other by sincere cooperation, and if we work it wisely into such method and form as will meet the outline just discussed, we can then help by expert cooperation, multiplied a hundredfold to ourselves. What is more important, we can multiply by many hundredfold our service to the state. Eventually—why not now?

Twenty-Six Suggestions to High School Teachers and Supervisors

J. B. Edmonson, Inspector of Schools, University of Michigan

On the basis of about 800 visits to Michigan high schools it is my observation that many high schools are operated at a low standard of efficiency. This condition is due in part to the failure of the teachers and principals to agree on certain common aims, profitable practices, and school responsibilities. This failure to agree on policies and practices I attribute to the following reasons:

First, the erroneous notion that any high school teacher can, because of superior training, devise his own policies and practices without outside guidance or advice.

Second, the failure of superintendents and principals to extend the same kind of supervision to the high school as is provided for the elementary schools.

Third, the false belief on the part of many high school teachers that as "specialists" they need give no attention to the general needs and aims of the high school.

Fourth, the ungrounded fear of standardizing classroom practices with a resulting loss of freedom and initiative on the part of the teacher.

In the hope of improving school practices the following suggestions have been issued to the Michigan high schools. These suggestions are based on the actual practices in many of the best schools rather than on the practices recommended in textbooks. In order to prepare the best list of specific directions a draft of suggestions similar to those given in this paper was submitted to sixty high school principals and superintendents in attendance at the 1920 summer session at the University of Michigan. On the basis of their criticisms the 26 suggestions were revised.

It is my belief that an early agreement by high school faculties on the adoption of certain of the 26 suggestions will serve to eliminate many common difficulties and pave the way for a better average of classroom work. Of course it is not expected that the specific directions will be accepted without careful thought on the part of teachers and supervisors. It is urged that nothing be copied directly into the practices of any teacher without an effort to understand the principles that should underlie and guide in all teaching process. In the letter to Michigan schools, the teachers, principals, and superintendents are urged to discuss the meaning and value of the suggestions and to formulate additional standards of classroom practice. The 26 suggestions are as follows:

1. During the first month, a teacher should plan to give the first ten minutes of each recitation to the assignment of each advanced lesson. (Dictate a few leading questions; prepare a small part of the advance; give supplementary material; or point out economical methods of preparation.)

2. Before the close of the first month, a teacher should file with the superintendent a general outline of the work for the first semester.

3. During the first month at least, a teacher

3. During the first month at least, a teacher should give much attention to the study habits of the pupils. (Use directions in Whipple, "How to Study Effectively.")

 A teacher should have two or more desk copies of the more recent textbooks in each of his subjects. (Buy these from the library.)
 A teacher should insist that pupils stand

A teacher should insist that pupils stand and talk to the class when called on for a topical recitation.

6. A teacher should study the vocational, cultural, and disciplinary values in his subjects. He should seek to convince his pupils that their work has genuine value.

A teacher should teach from notes rather than from the textbook.

8. A teacher should prepare a list of the useful reference books to be found in the school and local library.

9. A teacher should visit at least one neighboring school where high standards are observed. A full report should be made to the superintendent. Visiting days should not be taken immediately before or after vacations.

diately before or after vacations.

10. A teacher should try to settle all petty problems of discipline without outside help.

11. A teacher should avoid "talking shop" in

11. A teacher should avoid "talking shop" in public places.
12. A teacher should reach the school at least five minutes before the time fixed by the local

authorities.

13. A teacher should seldom leave the school building until fifteen minutes after dismissal and

building until fifteen minutes after dismissal and should seldom remain longer than one hour after dismissal.

14. A teacher should refrain from destructive

criticism of the community, the school, or associate teachers.

15. A teacher should expect to assume his

share of responsibility for study hall supervision, noon period, lunch supervision, for hall order, and for the direction of student activities.

16. A teacher of science, mathematics, and other studies should emphasize penmanship, spelling, grammar, and oral English.

17. A teacher of English or history should give direction to the outside reading of the pupils. (Every high school pupil should be expected to do much reading for pleasure.)

18. A teacher of a laboratory subject should be an expert housekeeper.

19. Use a portion of each class period on Monday for a combination oral and written review of the previous week's work. (The use of the week-end to correct papers is not good management.)

20. A daily three-minute written quiz on an important question will serve to stimulate careful preparation of daily work. (Correct such papers in class but collect.)

21. A teacher should try to discover physical defects of pupils, and take them into account in seating arrangements, quizzing, etc.

22. A teacher should give his pupils the first chance to correct, supplement or summarize any contribution of a pupil to a class.

23. A teacher should always avoid saying uncomplimentary things about his pupils, or discussing their faults with any one other than the pupils themselves, the parents of pupils concerned, or the superintendent.

24. A teacher should know the N. E. A. Aims of Secondary Education. (Consult Bulletin 1919, No. 35, Federal Bureau of Education.)

25. Every teacher should study the efficiency card entitled "To Help Teachers Discover their Own Strength and Weakness," published by the Bureau of Municipal Research, 361 Broadway, New York City, New York. Price \$0.01.

It is estimated that the next session of the Pennsylvania State Legislature will have to provide for a deficit of \$1,500,000 in the state achool accounts. During the past year upward of \$6,000,000 was provided by the state to meet increases in teachers' salaries authorized by the Woodruff bill passed by the 1919 legislature, and only \$10,500,000 were appropriated for the two school years which end next June.

The Accounting System and Budget of a Small City

H. P. Smith, Superintendent of Schools, Lawrence, Kansas, and Professor of Education, Kansas University

Some very excellent work has been done in the larger cities in the field of school financial records, but in the smaller cities, the consolidated school districts, and the rural communities conditions are as nearly chaotic as they well may be. It is not that school officials are dishonest or that they do not appreciate the necessity of financial records; it is rather due to the fact that the existing systems are either too elaborate or that they are scarcely more than a record of receipts and disbursements without especial reference to the ends for which they were des gned.

The N. E. A. in its report on "Uniform Records and Reports" (February, 1912, St. Louis Meeting) has done a very commendable piece of work in making us conscious of a sensible distribution of receipts and expenditures. But the stock systems on the market that are designed to make that effective are far too formidable for a man whose work as treasurer or secretary is merely incidental-almost a donation - and whose business or professional instincts are paramount-such records are far too formidable for him to tackle, especially where no state law requires the keeping of such a financial rec-

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And yet cost accounting certainly has its place in an educational system as well as in an industrial plant. It is essential that a superintendent and his board know in detail the sources of the receipts of the school corporation. It is imperative that they be able to tell what part of the school funds have been used for general control, instruction, operation, maintenance and auxiliary agencies. Taxpayers are prone to object to higher taxes and when they perceive that from thirty per cent to sixty per cent of their taxes are paid for the support of the educational system of the community they question whether or not there has not been unnecessary waste.

When a stewardship is rendered in the form of inadequate financial reports and where school officials are unable to explain except in the vaguest possible manner why it has cost more to instruct pupils and to operate and maintain the educational system this year than it did last, the taxpayers not infrequently register their votes against the people in control with the result that there is a policy of retrenchment adopted which should and could have been averted had a simple yet adequate system of school accounts shown accurately that increased expenditures did not after all represent a waste but a legitimate expenditure of school funds wholly justified from many points of view.

It was such a situation which led the author and the Board of Education with whom he was working to adopt in 1913 the system described in the May, 1915, issue of the School Board Journal, and to enlarge it three years later after certain modifications of the Iowa statutes so that it is adapted to both the state reports and to the Bureau of Education reports while at the same time it affords an adequate means of making the school district budget.

The accounting system illustrated herewith is a loose leaf system consisting of alternate long and short leaves, forms 1 and 4 being printed on a long leaf and forms 2 and 3 on a short

Form 1 contains spaces for the "General Description of Receipts and Disbursements." These columns constitute a very elaborate warrant register including as they do the date of each warrant, the name of person to whom paid, for

what paid and the warrant number. Following this are the "Grand Totals" of the two funds authorized by the Iowa school code, including both receipts and disbursements for each fund. It is obvious that the difference between the receipts and disbursements of each fund at any time will indicate the amount on hand in that fund. The receipts of each fund are then distributed under the various sources from which they may be derived according to the Iowa code. Each line is numbered on the left hand side of the page so that, if in binding the lines do not justify accurately, there still need be no errors either in extending items or in reading them.

Division of General Fund.

The two funds are then distributed so that both state and national reports may be made with comparative ease and rapidity at the close of the fiscal year.

General Control-Board of Education. Office of Superintendent. Other Purposes

> Male Supervisors Female Supervisors. Male Principals. emale Principals. Male Teachers Female Teachers Supply Teachers.

Textbooks Printing Stationery and Supplies.
Manual Training.
Household Arts.

Kindergarten. Other Expenses eration of the School Plant— Wages of Employes.

Janitors' Supplies.

Water, Gas. Light and Power. Telephone. Express, Freight and Dray.

Other Expenses Maintenance of the School Plant-Repairs.

Insurance. Equipment.
Other Expenses. Auxiliary Agencies-

Library. Health Department. Miscellaneous Expense

Tuition Refund.

Other Expenses.

Under each of the main divisions blank columns appear so that as the activities enlarge other distributions may be added. The column "Other Purposes" is added in each instance for the convenience of the bookkeeper who is at times puzzled in the distribution of an item which belongs under the general heading but apparently does not fall under the specific classifications appearing. It can, of course, be used an indolent bookkeeper to avoid a little thinking or referring to requisitions, but their advantages overweigh the disadvantages.

The Schoolhouse Fund.

The Schoolhouse Fund is used under the Iowa code for the purchasing of sites, the building and equipping of schoolhouses, and the paying of interest and indebtedness. It classifies itself admirably, then, under the following headings which are included in the N. E. A. classification: Capital Outlay-

Building and Sites. Equipment. Special Assessments. Other Expenses. Debt Service Bonds.

> Interest Other Purposes.

These different accounts are distributed over forms 2, 3, and 4 in a convenient manner which may be seen by referring to the cuts. Each account is numbered (e. g. Rent under Miscellaneous Expense carries the number 38). Whenever an amount is extended to any account the number of the account is entered in the vertical column marked "No. of Account" which follows immediately after the number of the warrant on the left side of Form 1. This makes reference to the account to which an amount is extended easy and obviates the necessity of glancing over a large number of columns to locate the right account.

This classification corresponds roughly to the items listed in the "Abridged City Schedule" in the Report of N. E. A. Committee on Uniform Records and Reports. For convenience the Standard City Schedule is given together with the Abridged City Schedule of that report showing how the items of the "Standard City Schedule" are telescoped into the items of the "Abridged City Schedule."

TABLE I.

Standard City Schedule.

(N. E. A. Committee Report on Uniform Records and Reports, 1912.)

A. PAYMENTS.

I. Expenses (Cost of Conducting School System.) Expenses of General Control (Overhead Charges).

Board of education and secretary's office. School elections and school census.

Finance offices and accounts.

Operation and maintenance of office building. Offices in charge of buildings and supplies.

Office of superintendent of schools

Enforcement of compulsory education and truancy laws.

Other expenses of general control.

Total for general control. Expenses of Instruction.

Salaries of supervisors of grades and sub-Other expenses of supervisors

Salaries of principals and their clerks. Other expenses of principals.

Salaries of teachers

Textbooks.

Stationery and supplies used in instruction.

Other expenses of instruction.

19.

Total for instruction.

Expenses of Operation of School Plant. Wages of janitors and other employes.

Water.

Janitor's supplies

Other expenses of operation of school plant. Total for operation of school plant.

Expenses of Maintenance of School Plant.

Repair of buildings and upkeep of grounds. Repair and replacement of equipment.

Insurance.

Other expenses of maintenance of school Total for maintenance of school plant.

Expenses of Auxiliary Agencies. a. Libraries.

Salaries.

Other expenses

b. Promotion of Health.

Salaries.

Other expenses. Transportation of Pupils.

Salaries.

Other expenses

Total for auxiliary agencies.

Miscellaneous Expenses.

Payments to private schools.

Payments to schools of other civil divisions.

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Financial Record of the Independent School District of Newton

DISBURSEMENTS OF THE INDEPENDENT SCHOOL DISTRICT OF NEWTON

DISTRIBUTION OF THE GENERAL FUND

Forms of Financial Record for the City of Newton, Ia.

The four forms shown are carried in one loose leaf book arranged so that the short and long leaves alternate. Form one which is a left-hand page, backing form 4, begins with the date and description of receipts and disbursements, columns for the grand totals and columns for the distribution of receipts under the several subdivisions of the (1) general and (2) schoolhouse funds. The record of disbursements begins on form 2, which is a right-hand page and continues over to forms 3 and 4.

The sheets contain space for 42 entries on each page. The longer sheets measure $23\frac{1}{2} \times 13\frac{1}{2}$ inches; the shorter sheets, $17 \times 13\frac{1}{2}$ inches.

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Financial Record of the Independent School District of Newton

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| 45. 46. | Other miscellaneous expenses. Total for miscellaneous expenses. |
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| II. | Outlays (Capital Acquisition and Con- |
| 47. | struction.) |
| 48. | New buildings. Alteration of old buildings. |
| 49. 50. | Equipment of new buildings and grounds. |
| 51. | Equipment of old buildings, exclusive of re- |
| 52. | placements. Total for acquisition and construction. |
| , | III. Other Payments. |
| 53. | Redemption of bonds. Redemption of short-term loans. |
| 54. 55. | Payment of warrants and orders of preced- ing years. |
| 56. 57. | Payments of sinking funds. Payments of interest. |
| 58. | Miscellaneous payments, including payments to trust funds, textbooks to be sold to pupils, etc. |
| 59. | Total for other payments. |
| 60. 61. | Balances at close of year. Total payments and balances. |
| 61. | B. RECEIPTS. |
| | Revenue Receipts. |
| 62. | Subventions and grants from state. |
| 63. 64. | Subventions and grants from county. Subventions and grants from other civil |
| | divisions. Appropriations from city treasury. |
| 65. 66. | General property taxes. |
| 67. | Business taxes (licenses, excise taxes, taxes on corporations, taxes on occupations, etc.). |
| 68. | Poll taxes. |
| 69. 70. | Fines and penalties. Rents and interest. |
| 71. | Tuition and other fees from patrons. |
| 72. | Transfers from other districts in payment of tuition. |
| 73. | All other revenue. |
| 74. | Total revenue receipts. Non-Revenue Receipts. |
| 75. | Loans and bond sales. |
| 76. 77. | Warrants issued and unpaid. Sales of real property and proceeds of in- |
| 11. | surance adjustments. |
| 78. 79. | Sales of equipment and supplies. Refund of payments. |
| 80. | Other non-revenue receipts. |
| 81. 82. | Total non-revenue receipts. Total receipts. |
| | Balances at beginning of year. Total receipts and balances. |
| 84. | The distributions above listed in the Stand- |
| ard | City Schedule obtain for elementary and |
| | ondary day schools of all types, elementary |
| | secondary evening schools, normal schools, |
| | de and industrial schools, special schools, and cial activities. |
| - | For a small system this is obviously too elab- |
| ora | te. The table below shows the manner of |
| | lescoping" the items of the Standard City |
| | nedule into an Abridged City Schedule which |
| | dapted to smaller cities. The numbers used the second column refer to the numbered |
| | ms in Table I. TABLE II. |
| Tal | ble Showing Manner of "Telescoping" |
| | Items of Standard City Schedule Into Items of Abridged City Schedule. |
| (N. | E. A. Committee Report on Uniform Records and Reports, 1912.) |
| Abi | ridged City Schedule Items of Standard City Schedule 1 |
| 1. | General control 2 |
| A | 1 4 |
| | 5 |
| 2. | Office of superintendent and attendance 5 7 |
| 3. | department |
| | visors |
| 4. | Salaries and other expenses of princi- \(\) 13 |
| 5. 6. | Salaries of teachers |
| 7. | Stationery supplies and other expenses (17 |

Stationery, supplies, and other expenses § 17

Wages of janitors and other employes..

of instruction ..

| | Other expenses of operation |
|--|---|
| 11. | Maintenance of school plant |
| | 18 |
| 12. | Libraries |
| 13. | Promotion of health |
| 14. | Transportation of pupils |
| 15. | Miscellaneous expense |
| | |
| 17. | Buildings and sites |
| 18. | Equipment |
| 21. | Payment of bonds and warrants and to sinking funds |
| 20. | Interest |
| 22. | Miscellaneous payments |
| 25. | Subventions and grants from state |
| 26. | Subventions and grants from county |
| | Subventions and grants from other civil |
| 27. | divisions |
| 27. 28. | Appropriations from city treasury |
| 27. 28. 29. | Appropriations from city treasury General property taxes |
| 27. 28. 29. 30. | Appropriations from city treasury General property taxes Business taxes |
| 27. 28. 29. 30. 31. | Appropriations from city treasury General property taxes Business taxes Poll taxes |
| 27. 28. 29. 30. 31. 32. | Appropriations from city treasury General property taxes Business taxes Poll taxes Fines and penalties |
| 27. 28. 29. 30. 31. 32. | Appropriations from city treasury General property taxes Business taxes Foll taxes Fines and penalties Rents and interest |
| 27. 28. 29. 30. 31. 32. 33. | Appropriations from city treasury General property taxes Business taxes Poll taxes Fines and penalties Rents and interest Tuition and other fees from patrons |
| 27. 28. 29. 30. 31. 32. 33. | Appropriations from city treasury General property taxes |
| 27. 28. 29. 30. 31. 32. 33. 34. | Appropriations from city treasury General property taxes Business taxes Poll taxes Fines and penalties. Rents and interest. Tuition and other fees from patrons. Transfers from other districts in pay ment of tuition All other revenue. |
| 27. 28. 29. 30. 31. 32. 33. 34. 35. | Appropriations from city treasury General property taxes |
| 27. 28. 29. 30. 31. 32. 33. 34. 35. | Appropriations from city treasury General property taxes |
| 28. 29. 30. 31. 32. 33. 34. 35. 36. 38. | Appropriations from city treasury General property taxes |

The accounting system described in this article corresponds very closely with the Abridged City Schedule. Where differences occur they are due to local conditions or to certain requirements of the Iowa code or of the State Department of Public Instruction. For example, there are several items appearing under "Instruction" which are made necessary by the Iowa code which requires separate reports on male and female teachers. Water, gas, light and power are grouped together because the municipality owns its own gas, water, and power plants.

Form 4 also contains two accounts for each building, viz: "Instruction" and "Other Expenses." This makes it possible to determine as accurately as may be the cost of each building both for instruction and for other purposes. For items which cannot well be charged to any one building there remain two accounts under the caption "No Special Building."

There are a number of checks in the record. The sum of all the accounts in the distribution of receipts under each fund should equal the sum of the receipts of each fund under "Grand Totals." Again, the sum of all the distributions of the disbursements under each fund will equal the "Paid" column in the "Grand Totals" of each fund. Finally, the sum of the "Distribution by Buildings" should equal the sum of the "Distribution of Disbursements" as well as the sum of the two "Paid" columns in "Grand Totals."

Finding the Cost.

It is possible to find the cost of any one item or of all items at any time during the fiscal year by reading the footings at the bottom of the sheets nearest the date desired, or the footings on any date will show the totals during the fiscal year up to that time. For costs between dates the footings of the earlier date are subtracted

from those of the later date. While it has not been so stated it is understood that the first line of each page is for footings carried forward, and the last line for the footings of that page including the items of the first line.

If a more detailed account with each building is desired it would be possible on the last page under the building name to have additional columns. A better plan, however, is to have a separate sheet of the same size as the longer sheets placed in the back of the binder. In a system of any considerable size the former plan, while excellent, would tend to make an unwieldy book.

It is not alone the possibility of knowing the exact cost between dates or at any time during the fiscal year that makes this record valuable; it performs a distinct service in the making of a budget for the next fiscal year. Of course it is a relatively simple matter to add the amounts authorized in teachers' contracts and janitors' agreements and add a lump sum in a haphazard way for other purposes, but in these days of soaring fuel costs, increasing rates of all kinds. and inadequate taxing laws it is far from satisfactory. With an accurate distribution of receipts and expenditures it is possible to estimate with a considerable degree of accuracy the cost of such items as fuel, water, insurance, repairs, and so on. In fact, the expenditure for fuel one year corresponded almost exactly with the amount estimated for fuel in the budget for that year. The item of insurance from year to year has shown that an equal amount of insurance written each year is much more to be desired than a large amount once in three years or once in five years. Without such a distribution record showing that item accurately it is probable that the average finance committee would seldom levy enough for insurance to care for it adequately from year to year.

The procedure in making the budget is simple. The totals of the different distributions for the fiscal year, both in receipts and expenditures, are listed on sheets of paper. This includes totals for the large headings as well as for the smaller subdivisions. Then the estimates of the budget for the next year are listed in a parallel column, space enough being left for explanations and for notations by committees and board members. Thus where increases are made explanations can appear. In a similar manner any reductions would have explanatory notes.

Function of Budget.

After the items of the budget are finally determined and passed upon by the board, these may be listed in red ink at the top of each column in the distribution ledger on the first sheet of the year. Thus the amount budgeted for fuel should be placed in red ink at the top of the column marked "Fuel" on the first sheet of Form No. 3 used in the fiscal year for which the budget is planned. Interested parties may then refer at any time to the amount budgeted without turning away from the distribution ledger. During these times when budgets are apt to be disregarded completely this will have obvious advantages.

An obvious function of a budget and an accounting system is to afford a board a guide in authorizing expenditures. But this primary use is often forgotten because there is no simple, systematic way of presenting the facts to the board at each meeting. This can be done by using a sheet having the headings and items that the distribution ledger sheets show. Under each item there should be three spaces, one for the budget appropriation, a second for the expenditures under that item up to the time of the meeting, and a third for the unexpended balance. With such a record before him the in-

(Concluded on Page 100)

ARE TEACHERS HUMAN BEINGS?

A Los Angeles Teacher in One of the High Schools

If there is any class of people who is intelligent and trustworthy, who is supposed to be human it is the schoolteacher. But alas, and then some, how often do you find a real human teacher? I think it is the fault of the system of preparation, and possibly you will agree with me, that the art of school teaching makes the most human individual in time less human.

To illustrate, the other day one of my friends heard a teacher, one of the female variety, lamenting the fact that she couldn't get married. My friend said, "Why, I should think you would have many chances, you can meet so many nice men in the faculty." "Men!" she said, "do you think they are men; why they are only teachers." But that is not the worst of it. These same men teachers who may have started in as men, gradually become petty, and oldwomanish in every sense of the word, simply because they never learned in the first place that humanity was human.

Before I go any further finding fault or better showing up the faults of my profession let me say that fortunately, or unfortunately as some will say, which ever way you choose to look at it, I have been a teacher for six consecutive years, and am now head of a department, and the impressions which I give you are formed on just so much experience. · However, before that time, I have had four years of college preparation, two years of special preparation, then ten to twelve years of practical experience earning my living in the world in two professions, (and if the salaries don't go up by next fall I will go back into one of them). I tell you this for I feel that I can judge somewhat the teacher from both the outsider's and teacher's standpoints.

But to proceed, let's take the average teacher. Most of them become excellent pupils in high school of the first grade, and being such they apply themselves diligently to their studies, and know almost nothing else besides what they learn out of their books. This part of it is alright and I don't discourage that, but what kind of human beings are they?

Then the second stage of the game is this: They go to college or normal school and apply themselves diligently there. Do they ever become members of any organization that represents real red blood? Sometimes, but it is very rare. They become Phi Beta Kappas, oh yes, but how many of them are star athletes, leaders on the musical clubs, men or women of wide acquaintance and express the loyalty and sentiment of the university which they attend?

There are a very few teachers who ever were known by more than a handful of college mates, and these knew them to be the "grinds" who always knew what they learned out of books but seldom represented the college. Remember there are exceptions to this I am telling you, but it is the case with most of the teachers who are in the faculties today.

Never Prepared for Life.

Then this class of people came out of college and, by the next fall after graduation, they began teaching in some high school, many times in the same high school they were graduated from four years previously. Now what do they teach their students? They teach them just what they learned in school and college. They teach them second-hand, just what they were taught to teach, and have they developed any personality, or initiative?

No they haven't. They learned their lessons and that was all that they learned how to learn. They know so very little of what is in the big

wide world that it shocks them awfully when a natural boy or girl uses a bit of slang or does a thing impulsively. They prepare their students for a higher institution and do not prepare them for life, for they never prepared themselves for life, and how should they know what life is? This condition is now showing a little evidence of changing, and vocational courses are preparing students for life in a grand way, but there is still much room for improvement.

Perhaps, it would be well to inform teachers just how they might help themselves, since this is more or less of an observation. One of the first things that make a teacher disliked by both pupil and layman is that they talk too much. The other day I suggested to a student that she take a certain subject with some other teacher. She replied that the teacher was all right but she talked too much and refused to take the subject if she could get out of it.

What do you think of that for a reputation? But isn't it true? Do you like a person who will "talk your arm off," like an insurance agent or book peddler, or any of those who make you shut the door in their face in order to get rid of them? If you saw them coming on the street you would walk a block to get out of their way, and I know it. I've done it. There is the greatest tendency to explain, and tell it over in another way, then begin again and explain it from another standpoint to be sure they all get it. If it's uninteresting possibly you may have to do that, but if you have a human viewpoint once is enough and every student will get it the first time, because if it's humanely given and you yourself are human, the chances are there will be interest.

The Human Interest Side.

If you make the lesson, or problem have enough play in it (human interest if you wish to call it such) you won't have to explain. Do the problem yourself, and show them how, like you play a game of tennis or football. Do you think boys sit down and read the rules of a game first, learning all the fine points, and then get up and play it. No! they begin by seeing the other fellows playing who know how, and that makes them want to do it. Then they imitate them and before long they know it. Some one of the crowd knows a little about the game and he starts them. By-and-by they ask how a certain play is made, then they imitate the men who know how and before you know it they all know how to play football or whatever the game is. Possibly some of them will learn the rules out of a book, but they don't do that first, and no one stands up and talks for an hour. No coach of any team talks to experienced men, that long, at any time.

No, dear teacher, cut out your talk, and if you have a problem, do it before them, and let them watch you do it, and you may never have to say a word. But you may have to answer a few questions. You will have a better voice at the end of the day, and some one will like you, maybe two or three someones, because you don't forever talk them to death. You will be human, like some of our prominent business men.

To illustrate: In my figure classes I always draw from the model first, (live model of course) showing the class how I get hold of the figure, and you can actually hear their attention, it is so still. The results take care of themselves, for all I have to do is answer questions as to how I did it, and 90 per cent of the class in six

weeks' time can make their work look like a human being in good proportion.

I do the same way in design without saying a word. It is so much easier, and brings such quick results, and isn't that the way you would do if you asked your mother to show you how to mend your clothes, or bake a cake, or make a garden? Isn't that a more human way? Possibly my experience on the stage has helped me gain the attention of the audience for pantomine will command attention quicker than spoken word. You all want to know what he, the actor, is going to do next, and you never talk until it's all over. Isn't that more human to your audience, the pupils?

Airing Pedagogical Knowledge.

Teachers as a class like to air their knowledge whenever they are outside in society, and most laymen, in order to be kind, or to listen to the "poor fish" as they think, ask them how school goes, and having taken the tip, they immediately proceed to explain everything from Epectitus to Wilson, from protoplasm to populism, and then trace it all backwards.

Probably it is the fault of the layman in starting off this pedagog, but the "old fossil" (quoted from college text) will be just as willing to be started, and his vanity will be extremely flattered if some one will only start him off and give him the floor. But he is absolutely ignorant of ball games, foot or base, or the automobile races, or who is starring this year in New York, or Charlie Chaplin or Ponzi or some other renowned individual whom every business man will know about. He doesn't know what the small school boy means when he uses the slang phrase, "I'll tell the world."

This, by the way, was used in my school, and one of my teacher friends said: "How could you?" Why, "dere teechur," are you so ignorant about the world, and have so much of the schoolroom shut up in your head? You are growing to be sure, and know a little more about it than you did before the war, but there is ever so much room for improvement. There is perhaps no other profession which is so everlastingly tied down to their work as teachers. The average layman doesn't understand this, for a lawyer, doctor or business man won't talk shop after hours as a teacher will, and the chief reason why a teacher forgets to be human.

Another point which keeps that humanity away from teachers is this: Do you set up a barrier between yourself and your students? Do you become falsely so dignified that they never approach you except in their falsely dignified manner? Between teacher and pupil there is often raised a false position, neither of whom ever show their true nature. After a while the teacher becomes so falsely dignified and unhuman that it finally becomes a second nature to them and thus we find the pedagog a species of intellect and discipline with only the outward appearance of a human being.

Being a Good Scout.

Do you know how to be a big brother or a sister to your classes? If you don't, try and find out, and see what a difference it will make in you, your students, and your results in the work. That veneer that so many teachers assume is awful, and has no business in a modern schoolroom. If you can't control your students with kindness and get them so interested that they forget to go when the bell rings, then you have no business as a teacher, you should try something else.

Can you keep your temper and smile when

the small boy accidentally knocks over the paint? What do you do then? If you are human and a true teacher, you may cuss to yourself a little, hurry and sop it up, and then ask the poor kid how it happened. Do you remember how you may have done the same thing yourself once, and how it was just an accident? It won't happen again.

What do you think that kid will say of you outside of school? Do you care? He will explain that he was perhaps fooling, he knew he ought not to have done it, but after it was all over he would say, "It sure was a sight, but we cleaned it all up so you'd never know the difference." "What did the teacher say to that," from another who is in another class, "I'll bet he gave you thunder." "He did not," he would reply, "Prof. C. is human." If this had happened wouldn't you rather have had such a thought sent toward you instead of making a fool of yourself by losing your temper and making the boy "stay after school" for just an accident. You may have done the same thing yourself when you went to school. How would you like to have a student say that "You were the best scout in the faculty"?

This not because you allowed more freedom in discipline but because you listened to children's reason. I kept a journal of all my experiences when I was 14 years old and from that age till now, and how many times I wrote the following phrase, "We laughed like the dickens," or "we got to laughing in school today," and the subject of laughter was so trival. Do your children giggle and laugh? Does it get on your nerves, and temper? If so will you just think how you acted when you were that age, and perhaps you will have a little sympathy and human feeling for the student? I think my journal has helped me very much to be human, and now that I am telling you perhaps it will also help you.

Failure to Mix Socially.

What are you doing after school hours? I know what most of you do. You go to some educational exhibit or sit down and read a book, or correct papers, or plan your next day's work, or possibly go to the theater, or a friend comes over and you talk shop.

Are you doing any creative work in any line of endeavor? I know for a fact that among the art teachers of Los Angeles, there are only about ten who are doing any active public exhibition work, and only two or three are doing any public work in crafts. All most of them ever did was to study in some art school how to teach art and they made some excellent work while there, but to do any original work while they are teaching they never do anything. How can they expect to get any inspiration out of their classes? How can you dear reader? How can you expect to show, and prepare your students when all the work you have ever done creatively was years ago when you were studying, or when you did something in summer vacations? I don't wonder that many of the parents who send their children to school scoff at the way the teachers teach, for what does the art teacher know, or any other for that matter, know what they are doing if they don't first do it themselves?

I know of a teacher that is teaching the same problems, in the same methods that she learned fifteen years ago, and this same teacher has done so little creative work since she learned how to teach art that it would amount to only about a dozen pieces of work.

Many teachers read, study, go to art exhibitions, and see what some other teacher is doing, and think they are up to the mark, but they know nothing of creative work, and this condition is what takes away the life in some of the school systems.



JOHN JAY BLAIR

JOHN JAY BLAIR

Supervisor-Elect of School Buildings for North Carolina.

John J. Blair, who served Wilmington, North Carolina, for the past twenty years as school superintendent, has been named by the state board of education as supervisor of school buildings for the state of North Carolina.

Mr. Blair is well fitted for his new office by virtue of the fact that he has during his entire career been a special student of school architecture and schoolhouse planning. He has also been partial to the study of art. He took up painting with the late William M. Chase and with Charles W. Hawthorne of New York, and himself delivered a series of lectures on art subjects.

For a number of years he has had charge of the department of art and architecture at the University of Virginia summer school and for the past three years in a similar capacity at the University of North Carolina.

The appointment comes to Mr. Blair without solicitation on his part and in the full recognition of his eminent fitness for the office. He will strive to raise the standards of schoolhouse architecture in North Carolina.

Right here, however, it is not always the teachers' fault, for in some places, particularly where art is concerned, the teachers are paid to teach that old-fashioned method of drawing without the idea of art, and that is not what I refer to. It is when the teacher can improve and is contented to stay in the old ruts. Do you wonder that they are not human?

Devoid of Comradeship.

Another thing that gave me a cold-water shock when I first began to teach was this: I had an idea that when I met the faculty of which I was to be a member here was a bunch of jolly good fellows among the men in the faculty. Of course I thought they were all college men, graduates, fellows with push and pep." Anyone would naturally expect such a thing and if you met a crowd of college men in a college club anywhere else you wouldn't be disappointed. I expected to see some of the comradeship I experienced when I was in college, only possibly more so, and so I was introduced, braced one man, and asked him if he was a frat man. "No." "What college had he attended," "Yale." "What year?" "1902."

"How do you like teaching?"

"Very well."

"Pretty nice school up here."

"Yes, we like it."

Then I waited for him to talk. I hoped he would introduce me to some more of his fellow faculty mates. I waited a long time, then I said: "How long periods do you have for recitations?"

"Forty minutes I think, this year, we had 45 last year."

Another silence, one of those dead silences, that you can hear, and the longer you wait the harder it is to break. You see I had given him no tip to start off with, like some of the pedagogues. Finally after some minutes I would say, "See you later, etc., or something to that effect, and try it on the next man. Possibly he would open up and talk your "arm off," or perhaps you go thru the whole bunch of men and not one of them will tell you anything and

you realize that these are not men, they are "teechurs," they have lost that punch which most men have when they meet their fellow creatures.

They have lost what the average business man, or professional man never loses, human interest, and red-blooded manliness. They are never hale fellows well-met. They are a "bunch of sticks." If I met them on a college campus, I would pass them up as non-representative men of the college, just fellows who were there to get what they could out of college, but never put the littlest bit of spirit into college, never make a speech; never play a game, or be real, red-blooded leaders in anything. This I mean, is the majority of men in school.

What do you think most of them know when they come to high school to teach and be an example, to prepare for life the average student? You slap one of them on the back and yell "Hello old man" to them, and what do you get? I'll tell you in most cases, a mild "Oh! how do you do." They may want to be good fellows, but since they never learned how, the chances are they never will.

Do Teachers Know How to Play?

The women teachers, too, have gene to college or higher institutions with the idea of getting only what they can out of them, and continue to get and absorb, but with all their acquirements they fail in this one idea, to use and develop what they have obtained after they leave college. It is all very well to learn how, this we all must do, but too many find their natures stunted by forever acquiring, and then when the time comes to give out they fail as teachers.

One teacher in a nearbytown here, learned to do beautiful craft work in many different lines, but when the opportunity arose to teach some of it she refused because she wanted that line of work for herself, but she never used it. Could you ever think of the selfishness? Is that a human individual?

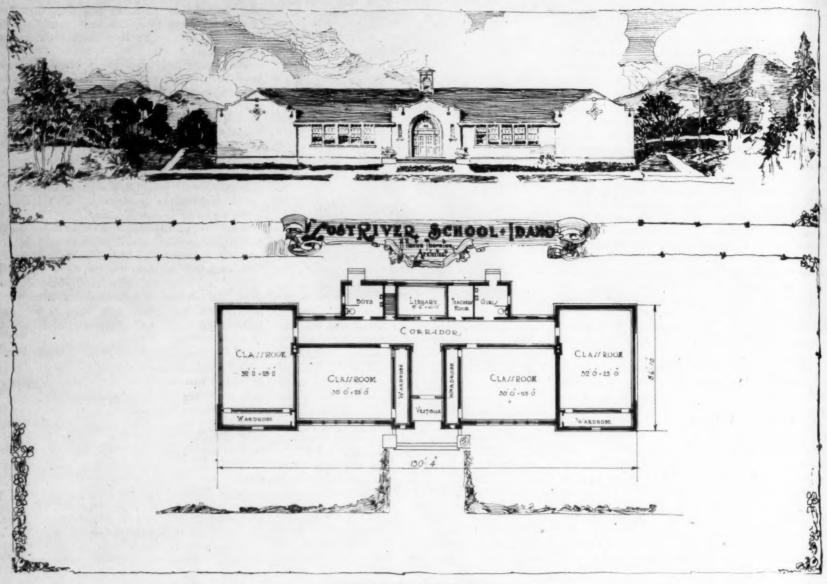
Again, how many of us know how to play? I have yet to know many teachers who know how to play. Those teachers generally marry young, or if they be males they leave the teaching force after a few years, and some other profession or business claims them. That is why so many teachers are leaving the profession now. That play impulse that makes you one of the students without being silly is a gift, and one that should be cherished if your work would have life and spontaneity to it. It will also develop your imagination, and if you are an art teacher you will need more of it than anything else.

Do you remember when you went over to grandpa's to stay over night, when you were a little fellow, and you awoke in the morning you had a hard time to find out just where you were, you were all turned around. You found the sun coming in the wrong way when it should be coming in behind you, and the chairs looked so funny, and the door was on the wrong side of the room, and you were in a wonder house, and just as your imagination was having such a good time, you came to full consciousness that you were only at grandpa's?

Then you can let your imagination work the same way when you take a piece of charcoal paper and cover it all over with a nice flat value, your teacher said it was that, but you may think it is just a fog or mist; then you begin to pierce that mist with your fingers and here and there appears a boat or a sail; or possibly a queer tree form while at the base is a wonder

Or perhaps you see a huge sail, and that means a boat, and in that boat appears a castle, yes, that would be different, and in the castle mist live some little people, and on the deck

(Continued on Page 100)



SCHOOL AT LOST RIVER, IDAHO.

H. Newton Thornton, Architect, Idaho Falls

MODERN SCHOOL BUILDINGS IN IDAHO

H. Newton Thornton, Architect, Idaho Falls, Idaho

The small towns of Idaho are noted for rapid growth. The erection of school buildings forms a considerable portion of an architect's practice who, specializes in this class of work. The drawings shown, illustrate some of the schools erected within a radius of 100 miles of the city of Idaho Falls, which is located in the Snake River Valley in the midst of the Rocky Mountains.

The one-story plan appears to find considerable favor even for large schools. Land is plentiful and cheap and where a large school would ordinarily require two or three stories for its accommodation, the group plan is adopted, the several units being connected with the main building by connecting corridors.

The chief advantages claimed in favor of the one-story building are,—easier exit in case of fire, thus giving a sense of security to pupils and teachers and tending to avoid panic; less property loss in the event of fire; eliminating the strain of stair climbing, an advantage for weak children and especially girls; easier school administration and admits better ventilation methods. Out in the open country or near a rural village or town where land is not divided into blocks, and where the land cost is relatively a minor matter, the one-story school building can grow naturally into the form best calculated to meet the many requirements of twentieth-century rural hygiene and rural education.

With regard to fire hazards and property loss, it should be remembered that in some country

districts the fire departments are quite a distance from the school.

Advantage of Group Plan.

The group plan allows extension at a future time without interfering with school work, and usually a plan is outlined looking to future requirements, several years being required to complete the whole scheme.

The Idaho Falls high school is built on the group plan on a lot 600 feet by 266 feet. The central unit built three years ago by W. R. Kelly, Architect of Seattle, Wash., as shown hatched on the drawing, comprising auditorium with stage and dressing rooms and eight classrooms and library. The administration department is also provided for in this part of the building and in the basement a heating plant sufficiently large to take care of all future units contemplated.

The heating and ventilating is by direct radiation and fan system of ventilation all automatically controlled. The plant contains an air washer and humidifier which augments the direct radiation and assists ventilation.

The Domestic Science and Commercial wings, including the gymnasium and swimming pool buildings were designed and construction recently completed by H. Newton Thornton, Architect of Idaho Falls.

The buildings on the main front extend a distance of 465 feet and comprise besides the central unit, departments for domestic science, manual training, commercial work and a cafe-

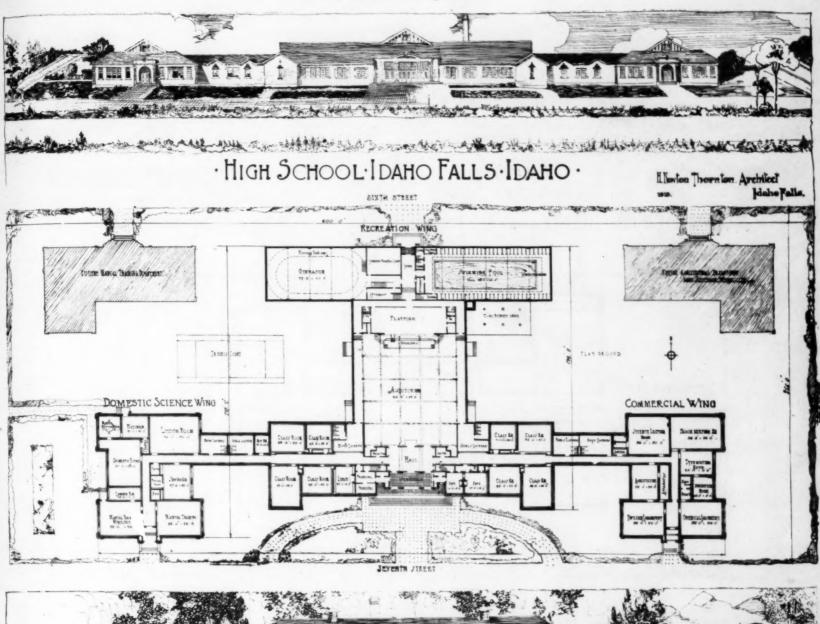
teria. The corridors connecting the wings are well lighted and afford an opportunity for natural ventilation. Locker rooms, toilet and rest rooms are approached from the corridors.

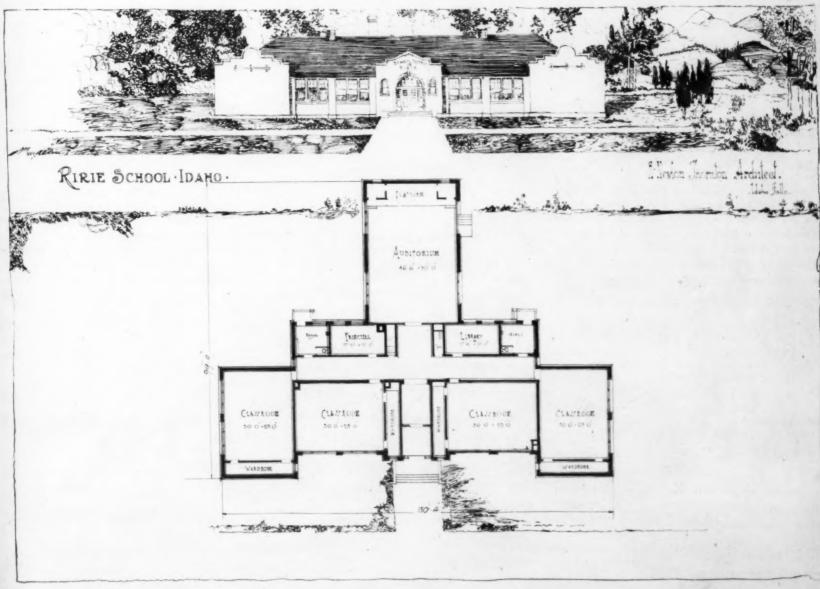
The Commercial wing on the east of the main building contains rooms for bookkeeping, type-writing and shorthand dictation. This unit also provides rooms for science departments, physical and chemical laboratories, agricultural rooms and store rooms for apparatus. It will be noticed that it is a common thing to install two departments in one building to avoid spreading out the buildings too much.

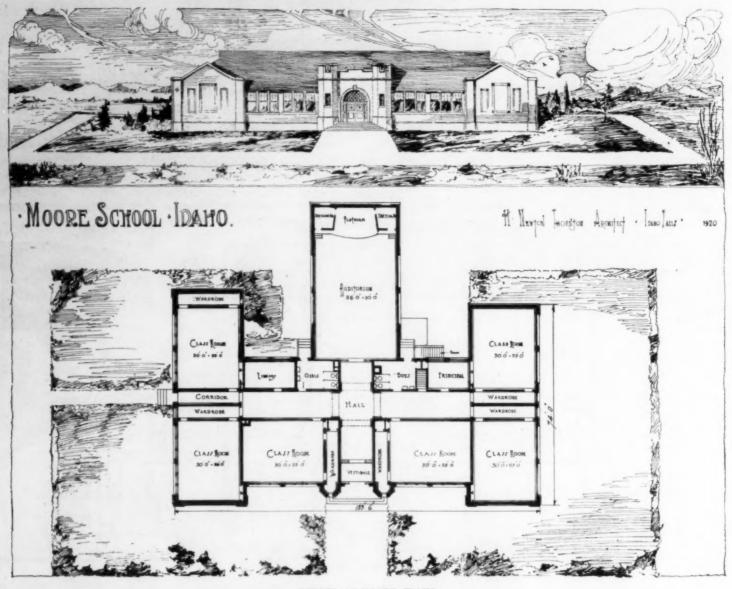
The domestic science on the west side of main building includes cookery room, with kitchen, pantry and model dining room and a large lunchroom provided with cafeteria counter and complete hotel equipment. There is a sewing room and fitting department complete in this part of the building.

The manual training departments are temporarily located in this wing, providing workshop, bench room, lumber room and store. This department will later have a building for its special use, with other manual departments added, to be erected on the northwest corner of the block.

The recreation wing on the north contains gymnasium, 40 feet by 75 feet, with a running track over, swimming pool, shower baths, toilets and hair drying and steam rooms, etc. Adjoining the gymnasium is a Junior Hand ball court







SCHOOL AT MOORE, IDAHO.
Mr. H. Newton Thornton, Architect, Idaho Falls, Idaho.

and locker rooms and showers for gymnasium use.

Equipped With Swimming Pool.

The swimming pool is 75 feet by 25 feet, of white and black mosaic tile thruout, with decorative lines of gray and black, marked off into feet the full length of the pool, and with water pool and football markings in 4 inch black lines to sides and bottom. Every pupil is required to take a shower before using the pool.

The pool is 3½ feet deep at the shallow end and 10 feet deep at the other end, and is filled with filtered water once each week, and is heated by means of a circulation system of hot water thru a Patterson instantaneous heater. The filtration is continuous whilst the pool is in use and complete refiltration in approximately

eight hours. The water can be heated from zero to 80 or 90 degrees in four hours.

In the hot days of summer the pool is proving one of the greatest attractions of the city and it is constantly in use day and evenings. It is open to the public five evenings each week and after four o'clock in the afternoon, and is fast becoming a recreational center for business men. A charge of 25 cents is made for admission to the public and numbers of business men form swimming parties each afternoon.

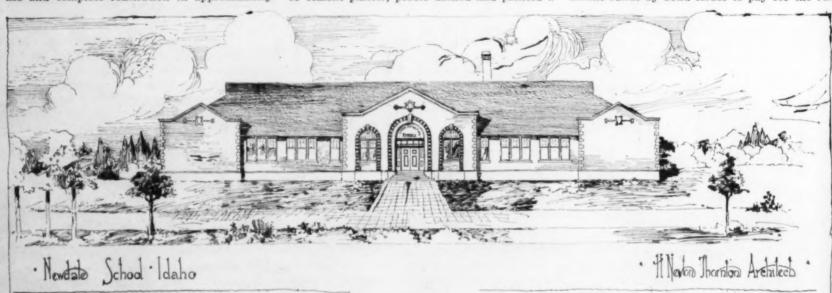
The outside walls of the building are of terra-cotta tile with a red rug face brick, the trimmings being of terra-cotta. The gables are formed of half timber work, the panels being of cement plaster, pebble dashed and painted a

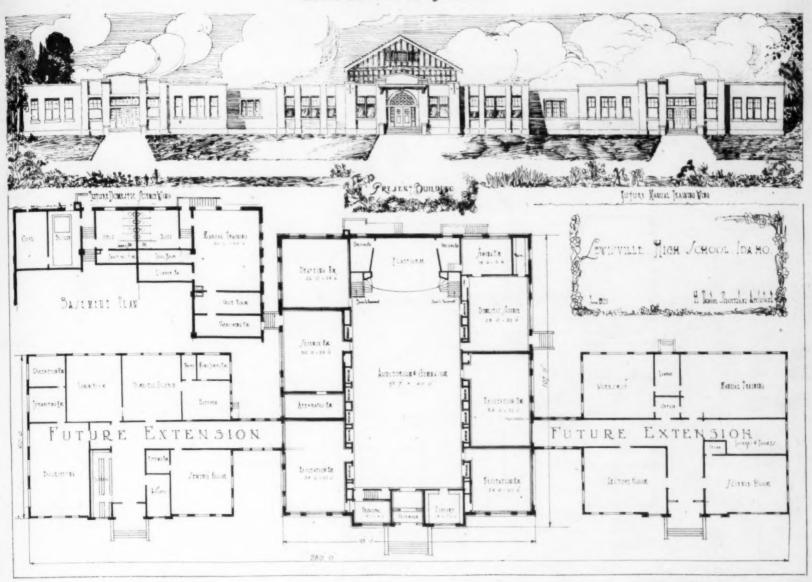
bright cream color. This touch of color forms a pleasing contrast with the green color of the roof and the red brick.

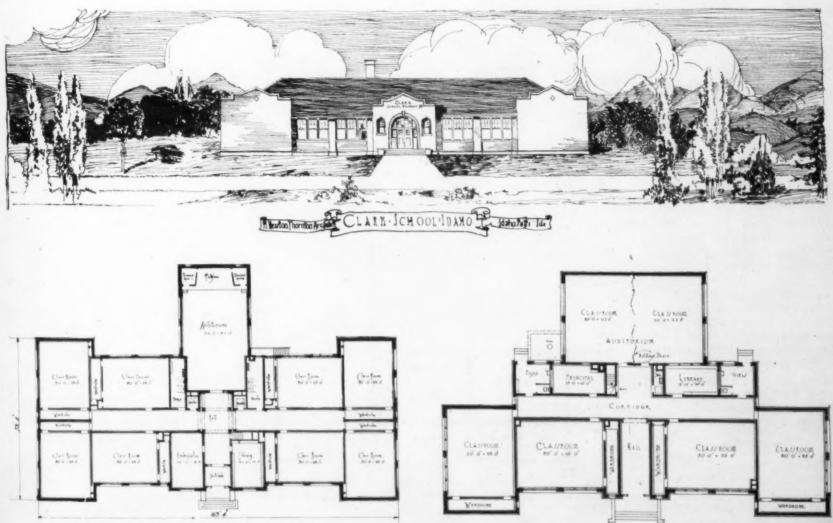
The floors are hardwood thruout, except tile to toilets, and vestibules, and all interior trim is simplified and to a great extent eliminated, no architraves or casings being used, but all reveals being metal nosings. The parking of the grounds has just been completed, together with two tennis courts.

Combining the New With the Old.

In the Mackay School there was the common problem of an old building, a grade school which ought to have been wrecked long ago, but the funds available would not permit of such a course. It was impossible to raise sufficient funds by bond issues to pay for the full



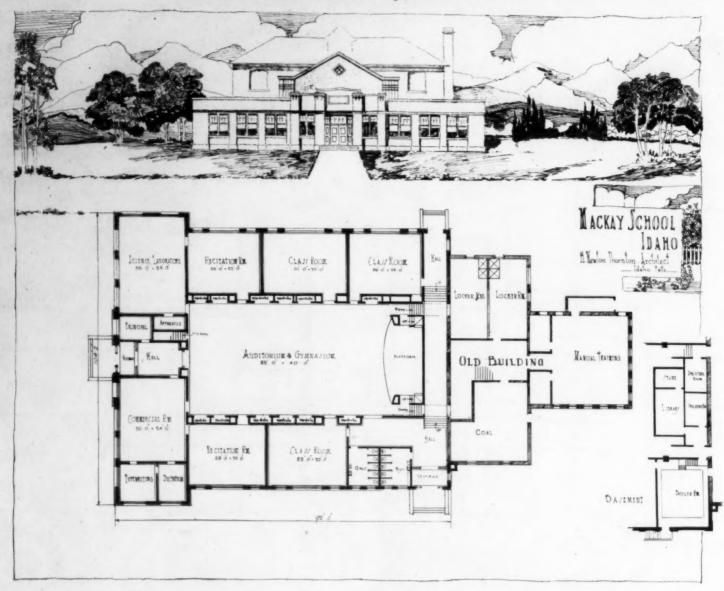


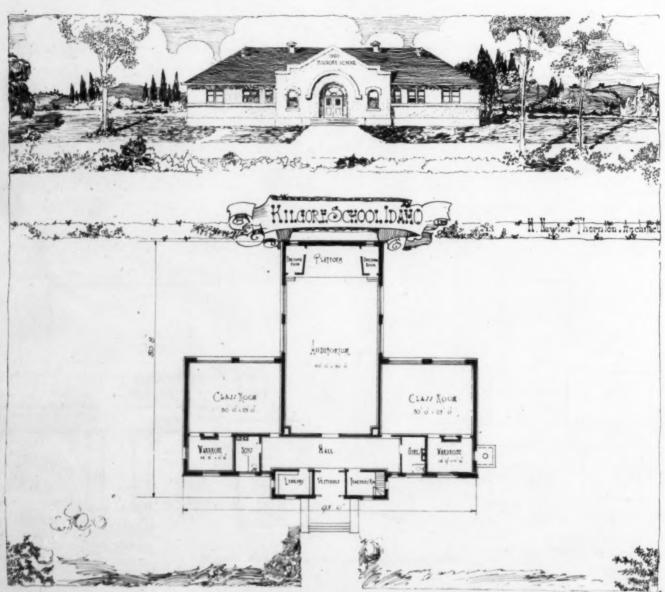


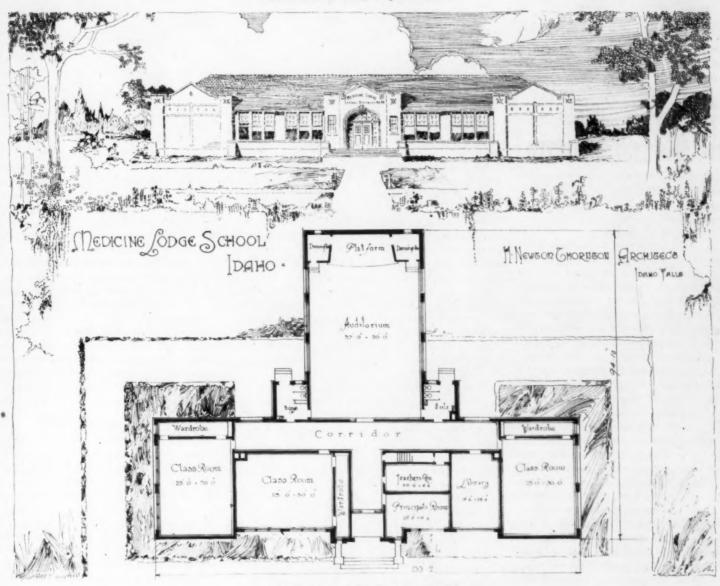
FLOOR PLAN OF SCHOOL AT NEWDALE, IDAHO.

Mr. H. Newton Thornton, Architect, Idaho Falls, Idaho.

FLOOR PLAN OF SCHOOL AT CLARK, IDAHO.







SCHOOL AT MEDICINE LODGE, IDAHO.
Mr. H. Newton Thornton, Architect, Idaho Falls, Idaho

accommodation needed and so some use had to be made of the old building, which was a twostory and basement.

This was accomplished by erecting the new building in front of the old building as shown, with a corridor connecting the two buildings. The old part is used for grade classes and partly for high school work. The basement which is four feet out of the ground, being used for manual training, and a room on the top floor which was too large for classwork being adapted to the use of domestic science.

Several of the rooms in the old building were too large for classwork, and had been divided by partitions, making two classrooms out of one. This is a common thing as to old schools, and the not very satisfactory as to lighting, seems the only possible method of tiding over the present difficulties of high costs and insufficient bonding capacity.

It was necessary to observe the strictest economy in the new building and the principal classrooms are grouped around the auditorium on three sides, thus saving outside walls and corridor space.

Where the auditorium walls come above the roof, they are of frame construction, pebble dashed in cement, and the windows shown afford good light. The auditorium is 40 feet by 83 feet with large stage and dressing rooms, and can be used for gymnasium purposes. Wardrobes for the new portion are formed in the side walls, with vertical sliding doors, and ventilated in a good manner. The auditorium is arranged for community purposes, and has facilities for motion pictures and theatrical plays.

One science room is provided, the two subjects being taken alternate years. The com-

mercial department includes rooms for book-keeping, typewriting and dictation. A library is provided under the stage for temporary use only. The remaining space is utilized by recitation rooms and classrooms for the grades. Maple floors thruout secured to wood sleepers embedded in concrete four inches thick, and ducts being formed under for the passage of steam and plumbing pipes.

The general outline of classwork was obtained from the school superintendent together with a probable list of pupils required to be accommodated in each department. Some allowance was then made for future increase in the number of pupils, and certain special features were incorporated and a tentative scheme was submitted for his approval, after which a complete sketch plan was prepared for the approval of the school board. The method of procedure was found to be very satisfactory.

The school at Lewisville is planned along the same general lines as the Mackay school, for the same reason that the strictest economy was necessary, altho in this case there was no old building to contend with. The central portion will only be built at present, and will provide science rooms, drafting rooms, domestic science, cookery and sewing departments. Agricultural training will be emphasized in this district being a rural high school district and it is planned in the near future to have an experimental station located in this district to be supported by the State.

The manual training workshop, glue room, varnishing room and lumber store are located in the basement. The remaining space is occupied by classrooms, recitation rooms and library and principal's room.

The future extensions will take care of all special departments and the central wing will then be used for classrooms and administration. One wing is made to serve two departments in order to prevent the administration becoming burdensome and the construction expensive, but there is no doubt that it is well to give the manual training departments a special building where the funds will permit.

It will be noticed in the grade schools that a certain standardization of plan has been adopted, and it is therefore necessary to explain each one in detail. The classrooms are designed to accommodate 40 scholars and conform to accepted standards of school planning.

The buildings are all of a necessity very plain with a view to economy, and are mostly brick construction, except in the case of Kilgore district school, which is 30 miles from a railroad, making it impossible to bear the freighting expense of brick. This building is built of concrete blocks, with air space, and stucco plastered with waterproof materials. The building is situated in the heart of the mountains, and the lumber, except finish, was procured from the forests within three miles of the school.

Even in the smallest schools in this section an auditorium and stage are considered a necessity both for school and community purposes. This room is also made to serve as a Gymnasium in some districts.

Consolidation is quite a common thing as at Newdale, where two or more districts combine to make a larger building and to enable them to employ a better organization of teachers, thus giving small rural districts the benefit of a building for the academic courses which they

(Concluded on Page 96)



School Board Journal

WM. GEO. BRUCE | Editors

EDITORIAL

THE NATIONAL EDUCATION ASSOCIA-

Some dozen years ago a few New York businessmen conceived the idea of forming a national Chamber of Commerce. To that end they sought the approval of the highest auspices in the land and succeeded in procuring the aid of the federal government in giving prestige and momentum to the movement. It was to be a thoroly democratic institution. Membership was to be recognized far and wide upon an individual and voluntary basis.

President Roosevelt and Secretary Strauss of the Department of Commerce readily got behind the idea. A connecting link between the government and the commercial interests was deemed by them desirable. The business judgment of the nation, it was held, must be brought to the service of statesmanship. It would lead to sounder legislation on problems affecting the economic welfare of the nation.

The scheme looked attractive, but it was doomed to failure from the start. The business men of New York, Boston and Philadelphia were well represented in the councils that followed. New York, abetted by Boston and Philadelphia, bossed the job. They were in perfect accord with each other, but the rest of the country—the backbone of American commerce—was absent. A collapse followed, attended with a lesson that was as wholesome as it was complete.

Then another attempt followed a few years later, when it became clear that something different, more comprehensive, more democratic would have to be devised. President Wm. H. Taft and Secretary Charles Nagel of the Department of Commerce lent all the prestige and influence of their high office to the new project.

A conference of the business men of the nation was called. No section of the country was ignored. The widest possible representation was sought. The delegate system was employed. The local chamber of commerce became the basic constituency. State chambers of commerce were recognized. National and state industrial and commercial bodies were not overlooked. Individual memberships also were cordially sought.

The democratic and representative character of the organization, thoughtfully and ingenudevised, at once assured numerical strength and financial stability. It did more. It secured for the project prestige and influence from the very start. Its promoters fearlessly announced that only legislation, movements and departures designed to advance the best interests of an entire nation, would be fostered. This quickened the conscience of the American business public and inspired confidence. Its policy to gather and collate the business judgment of the country on all problems of economic import and bring the same to the halls of congress, without the intervention of a lobby, was welcomed. Today the Chamber of Commerce of the United States is a recognized power in shaping

governmental policies dealing with the commerce of the nation.

So much for the business men of the country in creating a structure that shall serve their interests and those of an entire people. How about the educators? Is their duty to the nation less vital? Are they not equally capable of constructing an organization that shall impress the statesmanship of the land, and play a dominant part in the educational destinies of the Republic?

Over a half century ago the National Education Association was brought into life. Its conventions were carried to various cities of the country. Sometimes the cities that offered the highest quota of local memberships secured the convention; frequently the conventions were hawked and sold to the highest bidder. The conventions rotated from the East to the West and jumped from the North to the South.

If the convention was promised to California, the teachers of California became members for one year and dropped out the next. If Boston secured the convention of the succeeding year Massachusetts would appear on the membership roll in handsome numbers and politely fade out the year following.

Thus, the membership roll not only constituted a fleeting, shifting and uncertain quantity, but the organization never attained that stability, prestige and service which its name and mission implied.

But, more serious than this lop-sided membership were the inner contentions between various factors that dominated the life and destinies of the organization. The strife for recognition, for trifling advantage and for small honors, was constant. The game of politics that was staged at times was as fierce and as undignified as that adopted by the ordinary ward healer. Certain it is that some of the methods employed in gaining recognition were not in keeping with the dignity and the high purpose of the American schoolmaster and schoolmistress.

In reciting these facts there is no disposition to minimize the splendid contribution made by the National Education Association to the educational progress of the nation. This record stands for itself and deserves recognition. But, it could have accomplished more. While it espoused correlation and vitalization and what not in educational effort, it might incidentally have correlated and vitalized itself as a great institution and realized the full opportunities of its being. While it might have grown in prestige, in power and in service, it is today no stronger, no better and no more useful than it was during the first decade of its existence.

Happily, the awakening has come at last. There were those who saw a new National Education Association, a modern institution, that must grow in structural strength and scope, and thru these in service and achievement. They envisioned an edifice that was representative of every phase of American educational effort, and saw the necessity of welding the various forces into an organized whole, capable of expressing effectively, comprehensively and eloquently the educational tendencies and aspirations of an entire nation.

It is, perhaps, of small moment at this time to say that this great and laudable reorganization project had its opponents, that the smaller minds fluttered and sputtered, found minor exceptions and meaningless objections to cause its defeat, and finally raised a hullabaloo over its adoption.

It is far more important to contemplate the meaning of the change and set in motion the forces that will realize its benefits. If men of vision, of enterprise, of energy were to the fore in building the foundation, let them also assert

themselves in rearing the superstructure. They courageously employed the steam roller when that was necessary to bring about a laudable result. Let them not hesitate in employing their courage and ingenuity in bringing to fruition the great enterprise in hand.

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With a new type of machinery, well constructed, let the engineers provide for its successful operation. Bring the various educational units of the land, small and large, from the kindergarten to the college, from the humblest teacher's club to the largest state organization, into harmonious relation with the national body. Let the educators demonstrate the same hard, practical sense that has been demonstrated by the business men of the country. The interests of the latter are no less than those of the former. Nor is the educator less capable than the business man in devising useful instrumentalities for the common welfare of man.

Build up the National Education Association. Let its leaders strive for numerical strength, for democratic methods, for the highest degree of service. Let the organization command the attention, the respect and the confidence of the statesmanship, of the press and the public of an entire country to the end that it may render a higher and nobler service to the cause of popular education and the progress of the nation.

COST OF BUILDINGS TO DROP.

Those able to speak with authority on the subject predict that the cost of building will drop within the next six months. It is held that this is not a mere assumption but that certain conditions point assuredly to such a result.

While the public has submitted to the increased cost of food and clothing it has refrained from building even to meet actual necessities. This applied to schoolhouse construction in the same degree that it applied to home building.

Whether school authorities shall utilize the winter months in planning new school buildings and begin construction work upon them next spring depends upon the actual pressure for early relief. Every school board must determine this in the light of local conditions.

Here it must also be remembered that a timely anticipation of future needs is always in order. With a growing school population and the tendency towards compulsory school attendance the question of housing goes beyond the immediate pressure for added classroom space. It must contemplate not only the needs for next year but the year after as well.

WHAT DEFLATION MEANS TO THE SCHOOLS.

The return to normal pre-war conditions, thru the process of deflation now in operation, is annoying to certain commercial and industrial interests and has met with the vigorous protest of profiteers. The general public, however, welcomes the downward tendency of prices and experiences a sense of relief with every announcement of a price reduction.

The schools are vitally concerned. True, the school boards thruout the land have courageously and wisely held to the thought that the schools must be kept going at their usual pace, regardless of cost. But, the stress in many instances is a severe one.

While a return to normal economic conditions will by no means bring the cost of school maintenance down to pre-war figures, the prospect of a price reduction promises needed enlargements of school accommodations. Teachers' salaries will remain in future on a higher basis than they have in the past. The former supply and demand basis will be discarded and salaries will be more commensurate with the service rendered and the dignity of the teaching profession.

This in reality will mean, or ought to mean, a more contented teaching constituency.

But, lower cost of materials will eventually mean more and better school housing and a more amplification of school supplies and equipment. An era of new school buildings is at hand. Architects, builders and contractors do not promise an immediate or even ultimate reduction in the cost of labor and materials but with the reduction in textiles and food products the reduction in other commodities is inevitable.

There should be no hesitation in planning new buildings where these are badly needed. Contracts should provide clauses whereby the fall in the cost of labor and materials will constitute a proportionate reduction in the ultimate cost of construction.

SUPERINTENDENTS' SALARIES.

Among the notable tendencies in the field of school administration is the decided advance in the salaries paid to school superintendents in the larger cities. The fact that industrial and commercial executives receive as a rule salaries far exceeding those paid to professional men has impressed boards of education much less than the fact that desirable educational executives must be properly compensated if they are to be secured at all.

The larger cities have come to the realization that school superintendents, who have a record for talent and service of a high order, are not to be picked off every bush, and that they cannot be induced to leave the smaller city unless proper inducements are offered. Ten years ago the \$10,000 man was the rare exception. Today he may be counted by the score.

The following cities of the country pay salar'es of \$10,000 to their school superintendents: Omaha, Neb., population 191,601; Akron, O., 208,000; Boston, Mass., 748,000; Buffalo, N. Y., 505,000; Cincinnati, O., 401,000; Denver, Colo., 268,000; Gary, Ind., 60,000; Louisville, Ky., 250,000, and Rochester, N. Y., 310,000.

Cities paying more than \$10,000 are: Jersey C'ty, population, 297,000, \$10,500; Chicago, 2,710,000, \$12,000; New York, 5,621,151, \$12,000; Pittsburgh, 600,000, \$12,000.

Th'rty-three of fifty-three leading cities have increased the salaries of their superintendents since January 1, 1920, by amounts ranging from \$500 to \$5,000. The prevailing terms are from four to six years.

Other cities will come up to the high water mark as soon as they are hit with a vacancy and begin to scan the country for a suitable successor. In cases of this kind it usually develops that the cities possessing able school superintendents will retain them at an increased compensation.

The conclusion here must be that the modern school superintendent is not overpaid. He usually deserves more than he receives, and the tendency to provide him with a more equitable compensation is to be welcomed.

STAND BY THE SCHOOLS AND GO TO JAIL.

The abnormal economic conditions which have afflicted the country at large are also playing some queer pranks with school authorities.

An interesting case comes to light at South Norwalk, Conn. Here the city charter provides that officials who incur debts for which there are no appropriations or funds, are made personally liable and subject to arrest besides.

The school board of that city found itself in the predicament of meeting the increased cost of school administration with an inadequate school fund. To deny an increase in the teachers' salaries meant the closing of the schools. To grant the increase it means a violation of the law and eligibility to a sojourn in jail.

The school board met the situation wisely and courageously. The schools of South Norwalk were opened and will continue to run with efficiency and on schedule time. In the meantime legal talent has been employed to devise a way out of the situation and incidentally keep the board out of jail.

The conclusion must be that this school board has been true to its task. It does not shrink from a high duty of American citizenship. Laws must be obeyed, it is true, but laws may become as obsolete as a last year's fashion plate. They are designed to promote and protect civilization rather than retard and obstruct.

STATUS OF TEACHER SHORTAGE.

There is, at this time, reason to believe that the cries of an impending school crisis in the United States thru an acute shortage of teachers, have been exaggerated. The fall opening of schools was attended with a reasonably full quota of teachers thruout the country except in the more remote rural districts.

In many instances, as a matter of expediency, the school authorities slackened on the standards of requirements for those entering the profession of teaching. Inexperienced teachers were more readily admitted and the superannuated were continued in greater numbers. The professional standards, as a whole, have suffered some. But, the conditions are far from a calamity and a crisis. The schools are running, and for all we know, are doing well.

No doubt, the cry had its inception in the need for a better compensation for the teachers and an improvement in the conditions under which they labored. With the increased cost of living it was only reasonable that a better income for the teaching profession be provided. In many instances this was due them even before the abnormal economic conditions had arrived.

The school boards of the country met the situation and solved it to the best of their ability and in the light of the difficulties that beset them.

Now then, as to the future. Will the higher salaries stand in the face of a decline in the cost of living conditions? Will there be a tendency to lower them again? Will the law of supply and demand, or a just appreciation of the value of the service rendered, determine future salary schedules?

If the pre-war salary schedules were too low then the post-war salaries are not too high. If the old schedules were too meagre, then the time to correct them is here. A return to the old basis cannot be thought of now.

The larger compensation must stand, but with it must also come the promise of higher standards in the teaching profession and increased efficiency in the service rendered.

The success of America's system of popular education must be sought in the integrity and ability of its teaching forces. These must be encouraged to render the greatest contribution to the prestige and stability of the great Republic.

WHAT IS AN EQUITABLE SCHOOL TAX?

With the decline of the purchasing power of the American dollar, and the corresponding increased price of commodities, the cost of government has been vitally affected. Particularly is this true of the administration of the educational affairs of the nation.

In dispensing popular education great forces of men and women must be employed and ample housing provided for the millions of its beneficiaries. The cost of teaching and supplies, of housing and maintenance, has mounted to fabu-

lous figures. But, the American people have recognized the fundamental need of efficiency in the nation's system of popular education and have yielded to greater sacrifices uncomplainingly.

There was a time when it was deemed proper to devote twenty-five per cent of the local tax yield for school purposes. This no longer holds true. A larger percentage of the total is required due, no doubt, to the fact that no other agency of government calls for greater forces in number and intellectual quality to carry out a delicate and imperative function adequately and acceptably.

Two factors come prominently into play here. First, the nation makes a larger demand upon its schools than it ever has in its history. The general progress of civilization has demanded greater cultural training, and the evolution in American industrialism calls for greater vocational training. Second, the increased cost of living has been reflected in a strong degree in the means that must be employed in the conduct of the American schools.

It is, therefore, no longer uncommon to find units of government expending from thirty to fifty per cent of the tax revenue for the maintenance of the schools. Nor can this increase be deemed either unwise or extravagant. Neither can it be said that the proportion of school cost, compared to the cost of other functions of government, must be subjected to uniform standards. Local conditions, as to the relative need for governmental utilities and agencies, must determine.

No one then can set up standards and determine upon the relative need of this or that function of government. If an adequate degree of school efficiency demands fifty per cent of the entire tax yield then that percentage is a proper one. Common sense must decide the actual needs, and every unit of government, be it large or small, must determine that question for itself to the end that the rising generation is amply equipped for the duties and responsibilities of American citizenship.

SELECTING TEXTBOOKS.

Hubert Wilbur Nutt, in his recent book on "The Supervision of Instruction" deals with the selection of textbooks as follows:

1. Is the text organized in keeping with the purpose for which the course is being taught?

- 2. Is the text adapted to the specific school field in which it is to be used? For example, is it a strictly high school text, or has it been compiled with a view of filling both a high school and junior college demand? Too many text-books have been prepared for commercial purposes; hence, they are not the best for any one specific field.
- 3. Is the text organized as a device, and as such does it measure up adequately to the principles and criteria for determining the selection of devices?
- 4. Is the text organized in the form of clearly conceived problems of method in teaching? If so, is its organization psychologically sound as to the type or form of method problem that is adapted to the particular group of pupils that will use the text?
- 5. Is the text made of the kind of paper and is it printed in the kind of type that enable it to meet the sanitary standards of favorable visualization? The statement of the supervisor should give a critical résumé of the weaknesses and the excellences of the textbooks used, in the light of above principles.

Winship says the N. E. A. has held its final meeting. We'll wager that he will attend next year's meeting as usual.

How Should Textbooks Be Selected?

The Superintendent's Point of View

Walter R. Sider, Superintendent of Schools, Pocatello, Idaho

Whatever method is adopted, textbooks should be passed upon by those who will use them working in cooperation with those who supervise the instruction. Textbooks should not be selected by laymen, nor by anyone incapable of passing upon them from a professional point of view.

Textbook adoptions should be public for the following reasons: (1) That all who have books may submit them; (2) that no secret influences may be at work. While secret readers and expert opinion may be obtained, there should be a time and a place set, where the book commission will listen to the book salesmen, and to the publishers on the respective merits of their books.

The report of the textbook commission to the authorities who will make the contracts should be based upon: (1) The expert opinion of readers selected for the purpose; (2) on the opinions of the teachers and supervisors who will use the books; (3) on the respective merits of the books as represented by those selling them (this taken into consideration with the first and second above); (4) on material values as represented in price, giving consideration to quality of binding, paper, and letter press; (5) the content of the books.

The following points are worthy of consideration in passing upon the content of textbooks: (1) social in their viewpoint; (2) adapted to the needs of the present time; (3) absolutely true to the best principles of Americanism; (4) free from religious, political, sectional, or party bias; (5) pedagogical; (6) accurate; (7) well arranged for ready reference and consultation.

The following well recognized standards may be applied to evaluating the books from a material standpoint: (1) Paper—should be pure white without gloss, of .075 mm. thickness; (2) Binding—sufficiently durable for the purpose contemplated; (3) Letter press—from new type and plates. Illustrations clear and adapted to the explanation of the text; (4) Type—for the first year, the type should be 2.6 mm., with 4.5 mm. space between the lines, for the second and third years it should be 2 mm., with 4 mm. space between the lines, and for the fourth grade it should be 1.8 mm., with 3.6 mm. space between the lines. For the other grades the standards below for adult readers are used:

Thickness of vertical stroke, .3 mm.; space between letters, .3 to .5 mm.; distance between lines, 2.5 mm. as a rule; maximum length of lines which should be uniform, 90 mm.; letters clear cut, and distinct, with deep, black tops. (For the reason that reading is done along the top of the line.)

Evaluating the Contents: Two important studies in evaluating the subject matter have recently appeared in the Journal of Educational Research. In the February, 1920, number on "The Application of the Scientific Method in Evaluating the Subject matter of Spellers," and in the June, 1920, number on "Overlapping in the Content of Fifteen Second Readers." These studies are by, and under the direction, of Dr. Clifford Woody of the University of Washington. They constitute the most valuable contribution to this subject made in recent years.

In the discussion on "The Evaluation of Spellers," Dr. Woody gives consideration to the many recent studies to determine what words are in common usage. Do the vocabularies of the spellers studied contain the words of common usage, or words of uncommon usage, and to what extent? The spellers are compared with the W. H. Anderson list to determine (1) what

words are in the spellers and not in the list, (2) what words are in the spellers and in the list, and (3) the list of words only (for comparison). The spellers are then measured from the viewpoint of determining which spellers list the words used most frequently, e. g., in the Anderson list there are 79 words which are used from 677 to 11,893 times in the 361,184 words of the Anderson list.

There are ten sortings of these words ranging from the first one-tenth of 79 words as above described, to the last one-tenth of 6,118 words used from one to five times. The speller words are measured against these frequencies of use to determine which spellers contain the most frequently used, and which contain the least frequently used words. The study shows con-clusively, that from 58 per cent to 77 per cent of the time devoted to spelling is spent upon words not commonly used. Dr. Woody in his Study in the Content of Fifteen Second Readers," comments upon the former practice of reading one text many times, giving credit to the value of the method in fixing the thought content. He then points out that modern pedagogy demands the meetings of the vocabulary words (in a given grade, for example) in many different situations to determine (1) Positive sight recognition, and (2) the various shades of meanings and shades of meanings obtained by word blendings.

The enormous supply of supplementary reading upon the market, and the amount of money spent for the same, make an evaluation necessary. Often the supplementary readers contain many of the same stories and much of the supplementary material of the basic texts. Dr. Woody's study shows the overlapping.

The books are first analyzed to show the number of pages devoted to folklore, to myths, to fables, to boy and girl, to rhymes, to birds, to plants, to fairies, to pets, to fowls, to plays and games, to historical and patriotic, to conduct, to insects, to lullables, and to other miscellaneous material.

The majority of the books devote a pre-

ponderance of space to such closely related fields as folklore, stories, fables, fairy stories, myths and a meager amount of stories involving boys and girls, birds, plants, pets, fowls, plays and games. The strange and fanciful have the greatest amount of space. The per cent of material from the studied second readers varies (to give a few instances), as follows:

Instructive Material.

11.0 23.6 16.0 0.0 100.0 Imaginative Material. 88.9 75.9 84.0 100.0 0.0

The range of instructive material in these books ranges from 0.0 to 100 per cent, with a median of 32.0 per cent. The range on imaginative material ranges from 0.0 to 100 per cent, with a median of 67.9 per cent. One reader includes no instructive material, and 100 per cent imaginative material. Another reader is the reverse of this. Only 15.3 per cent of subject matter is devoted to real nature stories. Fifty-one and eight-tenths of the subject matter is devoted to folklore, fairy tales, and myths.

There is not the right balance between instructive and imaginative material. There is room on the market for books of the balanced type. Of the fifteen readers studied, seven of the fifteen contained the selection, "Over in the Meadow." "The Four Friends," or better known as "The Town Musicians" was found in six of the fifteen. The duplication ranges from three to seven selections, making up the content of the fifteen readers studied. One reader had material entirely its own and showed no overlapping.

The value of the study is to enable the purchase of material different from that already in the hands of the pupils.

DEMOCRATIZED SCHOOL ADMINISTRATION

William L. Ettinger, Superintendent of Schools of Greater New York

The following constitutes a few of extracts taken from an address by Superintendent Ettinger recently delivered before the associate and district superintendents and other supervising authorities of the schools of Greater New York:

The schools of a democracy ought to be administered on a democratic basis, but it is no doubt true that the acceptance of this principle has not led to the elimination of modes of administration smacking strongly of either autocracy on the one hand or Sovietism on the other.

The administration of each school, so far as the statutes and by-laws will permit, should reflect the best judgment of the majority of the teachers of the school; but it should hardly be necessary to argue that a public school is not the personal property of either the principal or the teachers, and that the administration of the school should not be based upon crotchety notions or violent prejudices of either a principal or a limited group of teachers.

The Ideal School Principal.

My ideal school principal is one who runs an open door office and who, by sympathetic super-

vision, invites and encourages teachers to voice their best judgment with reference to the conduct of the school which the state and the municipality have entrusted to their care. Whether or not such cooperation is secured thru one device or another, such as is represented by a school council, grade conferences, or general conferences, is immaterial. Lest I be misunderstood, however, permit me to state that I am a very firm believer in definite responsibilities and centralized authority. The principal and not the individual teacher is the responsible executive in charge of the school. A laissez-faire policy that means headless, spineless, decentralized supervision may temporarily satisfy radical minds, but is certain to lead to disaster.

To the extent that teachers have a real voice in the administration of the school, so that despite rigid conditions imposed by equipment, size of classes, license requirements, and other factors not easily controlled, the school, nevertheless, represents the working ideal of the majority as to what is best under existing conditions, the school is a model school, whether it be part of a teachers' training school, a school

on Washington Heights, or a school in the heart of a lowly ghetto. I will not pause to particularize numerous conditions connected with school administration that have always been the basis of unrest and dissatisfaction in the teaching ranks. Let it suffice to say that, in my opinion, ambiguous ratings used only to block advancement, secret reports to supervising officials and to the Board of Examiners that have been used with all the effectiveness and injustice of a lettre de cachet, and petty tyranny based on pride of rank and lack of confidence in ones ability freely and frankly to discuss school conditions,—all have no place in a democratic school system.

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Councils and Unionism.

I am sure that frankness demands that I discuss teacher unionism, the very aim of which, according to its advocates, is teacher participation in school management and administration to a much greater degree than has ever been conceded. The advocates of trade unionism among teachers claim that unionism is the salvation for all our ills, pedagogical and administrative.

The answer to the question as to whether or not unionism is desirable must be found in the motives that prompt teachers to join any group, whether it be a union, a fraternity or a federation. To the extent that such groupings are prompted primarily by selfish interests, and are based upon class appeal and concepts of economic and national life that run counter to those for which our government stands, such groups, whether you call them by one name or another,

are vicious and undemocratic. We cannot ignore the bald facts that the schools of a democracy are the schools of the whole people, and not the schools of a particular class.

Moreover, let me affirm with great emphasis that nothing can be more detrimental to our schools than the assumption that the classroom teachers constitute a laboring class, a sort of intellectual proletariat who differ both in kind and degree from supervisors and administrators who, by analogy, are classed as sort of a pedagogical capitalistic class, constituting the sworn oppressors of the teachers with whom they live and labor day by day, and from whose ranks they are chosen. Any appeal to gross prejudices or to narrow class consciousness, whether labelled unionism or what not, contains the germs common to anarchism or bolshevism.

A teachers' union and the general union movement among teachers are just as good or just as evil as teachers make them. It is therefore the bounden duty of teachers in such organizations to be active to prevent the use of such groups for personal, political, or professional exploitation, and, above all, to maintain and promote those fine conceptions of service to our children and to our city which have always distinguished the teaching profession.

Chief Function of the Principal.

You will note that if the foregoing provisions define accurately the dut'es of a principal as the responsible administrative and pedagogical head of a school, such an official, even if so inclined, will hardly be able to live a sedentary life of indolent ease because it is obligatory upon him

to be the energized directing head of the school, constantly planning to assist his teachers in the light of the best professional thought and to mete out even-handed justice not on the basis of impulse or prejudice, but on the basis of assistance given and criticisms registered that are sufficient to satisfy any impartial critic.

The chief function of a principal in a large school organization is not to scatter his energy by the promiscuous presentation of so-called model lessons, which frequently have little relation or significance to the problems that perplex the inexperienced teacher, nor to devote himself to the personal performance of petty details that are properly the work of a subordinate supervisor or teacher, but rather to plan for the improvement of the school as a whole; especially to effect an improvement in those subjects and activities that are below par, and to help those teachers whose experience or lack of ability makes it imperative that special assistance be given.

It may be worth while, in a spirit of paradox, to state that the chief concern of the principal should be to assist the best rather than the weakest teacher. I phrase the statement that way only to indicate that the best pace makers in each grade able to assimilate suggestions as to methodolgy and management, relieve the principal of the necessity of giving model lessons, provided that thru a system of interclass visitation the less competent teacher is able to observe her more experienced colleague working under the same exacting conditions that she, too, must face in her daily routine.

The Superintendent's Relation to the Board of Education and His Part in Their Meetings

Edgar F. Bunce, Supervising Principal (Superintendent), Mount Holly, New Jersey

The relation of every school superintendent or any other head of a school system to the Board of Education for whom he or she is working is one which is very important and on which oftentimes depends the success or failure of both the superintendent and the school system.

It is a difficult matter to lay down definite fixed standards by which this relationship should be judged because of the fact that Boards of Education, superintendents, and local conditions differ so greatly. It oftentimes happens that a superintendent who fails in one place goes to another town and under different conditions with a different board makes a success of his work, and it is also true that a successful superintendent may go to a new place and be a failure. You know and I know of many men whose work in the classroom and with their teachers is excellent but who have failed or are failing to build up their school systems just because they can't seem to get along with their Boards of Education well enough to get from them the necessary support for their proposed activities. We also know of men of only mediocre ability who seem to be making good simply because they know how to get their boards to give them all they ask for.

You will doubtless say that usually it is not the superintendent who is to blame but some member or members of the board who seem to hold things up. I grant that this is oftentimes true but it seems to me almost impossible to try to change the caliber of our board members and as the superintendent usually gets the blame or rewards for whatever happens, for the purposes of this paper, I shall consider him the only party to whom advice is to be given.

Editor's Note—In the State of New Jersey the title "Supervising Principal" is the equivalent to the designation of "Superintendent of Schools" employed thruout the greater part of the country.

The problem every superintendent has to solve is,—"How can I best deal with my board so as to keep things running harmoniously and at the same time get the board to support me in my activities for the betterment of the schools?"

Know Your Board.

In thinking over my rather limited experience as a superintendent and those of others that I know of, I am of the opinion that there are at least six fundamental principles which should govern a superintendent in his relations with his Board of Education. The first of these is—"KNOW YOUR BOARD."

Try to get a line as soon as possible on the type of man or woman each member is. No two are alike and a superintendent must learn to sum up the possibilities and probabilities of each member. It also pays to know just how each member came to be elected, what organizations are backing him, what he hopes to do as a board member, etc. Such facts should be stored up to be used as times and conditions warrant.

By knowing the characteristics of each member you will know how to approach each one. Some will meet you more than half way in any matter you present, others will have to be urged into a thing and still others may be ignored almost entirely as they will always vote with the leaders.

You will have some members who will have to be taken notice of on all possible occasions and there will be others who are not to be influenced by any such personal attention but who make their decisions on reports coming to them from different sources outside of school.

You will have some members with whom you can joke and be very free in conversation and then others will have to be treated in a more sober dignified way. There are so many differ-

ent things which one has to discuss with board members that it pays to know their idiosyncrasies and peculiarities as well as possible.

The second big principle for a superintendent's success with his board is—"GET THE BOARD TO RESPECT YOU."

A superintendent must, in order to succeed with most boards, show his employers that he not only can handle his job successfully but that he is first of all a man. Boards of Education don't as a rule want at the head of their school systems anyone who is not respected by most of the people who know him, nor will they back up the policies of any such person to any great extent. Often it happens that a superintendent is able to swing a certain measure just because of his standing and his personality. A board doesn't want a superintendent who can easily be swayed this way or that. They want a person who stands on his own feet and if he is right sticks to his opinion and states his facts without fear or favor.

Get the Other Point of View.

Another fundamental principle in dealing with Boards of Education is "RESPECT A MEMBER'S POINT OF VIEW."

The superintendent who always thinks that he only is right and that his board members very seldom know what they are talking about will never succeed. There is nothing which will make an indifferent or harmful board member so quickly come around to seeing things in their right light and to take an interest in school matters as to let him think he is helping to run things. It has been said that it is a greater art to be a good listener than a good talker. The superintendent who listens to all sides of a question, who tries to get others' opinions and others' points of view, then in the light of all ideas thereby gleaned, expresses his conclusions

SCHOOL BOARD JOURNAL

will usually be right and will at the same time hold the interest and helpful efforts of his board members. It really isn't a very pleasant job to serve on a school board and unless members are made to feel that they are doing worthwhile things they soon lose interest and become non-helpers or worse yet hinderers.

Another principle which is very important is that the superintendent should be the leader of his board not a follower of the ideas promulgated by one or two members. One of the great reasons why superintendents fail is that they have no clearly defined mapped out plan of procedure for a year or series of years and only tackle things as matters bring them to a head. Most boards want to be led along paths of educational work and expect to be led. The weak, vacillating superintendent who waits for some one else to start things will soon lose the respect and support of those who hire him to really run things.

In leading a board to carry out one's program there is much need of the exercise of another fundamental principle in preserving a good relationship with your board and that is—"Use common sense and stick-toitiveness."

Is Your Project Timely?

Suppose you have a project to propose which means an outlay of considerable money. When should you launch this project? Not by any means when a lot of big bills have just been paid or when the board as a whole seem to be thinking of economy. Altho you may have your plans all made to take the matter up then, it will be far the best plan to say nothing about it for the time being and bring it up again at some more opportune time. I have found also that it pays not to propose too many new things at any one meeting unless it is at the end of the year when a sort of summary is being made of things to be done the following year but not necessarily to be acted on then. By taking one or two things at a time and by keeping hansmering away until they are done, then bringing up some more, etc., will I believe accomplish a lot in a year's time. Every superintendent will also have to realize sooner or later that he will have to do a lot of follow-up work if he wants things done. Matters are often referred to committees and then allowed to drag along indefinitely. The active superintendent keeps prodding the committee in a tactful way until something is done. Here again the superintendent must use good judgment. No board member likes to be continually bothered about school matters and this is especially true when he is busy or when his friends are with him.

The Importance of Tact.

The most important fundamental principle of all in dealing with board members and the one hardest for some superintendents to act on because of certain characteristics is, I believe, this: "Be tactful."

Just as no superintendent can succeed in helping a teacher in her work if he first does something which antagonizes her, neither can he succeed in working with his board if he antagonizes different members. It does not pay, for instance, to talk about your board unless you can truthfully say something in their praise. If you can't do that, keep still whenever any member is under discussion.

When presenting any matter in a meeting or in giving an opinion try to not do anything or say anything which can be taken as a personal matter. I have found that it doesn't pay to be too friendly either, with any member as the other members seem to resent it and are apt to consider that things are done because of personal likes or dislikes rather than from professional standards.

It is true that oftentimes a superintendent will know of things being done or will hear opinions given which will make him very indignant and very desirous of telling certain people just what he thinks of them. It doesn't pay. Think all you want to but only say things when some good for the system will result therefrom. Oftentimes it is better to postpone some measure or some discussion until conditions are more favorable. The tactful superintendent will see when it is wise to do such things. He can't afford to make many open enemies on his board as he will have enough secret ones and enough indifferent members to keep in line.

Just how much or how little a superintendent should take part in board meetings depends on so many factors that one can hardly say. I believe that it pays to have a concise account of most matters which you wish to present either written or typewritten and have this document read by the clerk. This can later be taken up in sections and discussed if necessary. I have found it profitable to be rather slow about discussing a matter orally until the members had talked it over or had asked me to give more light on the subject than my written account indicated. Board members do not like to feel that they are being influenced by oratory to do or not do things. The law gives the superintendent a seat in the board meetings and a voice in the discussions but it does not intend that he shall be the whole show. By sitting quietly listening as the meeting progresses a superintendent can usually clear up a point or direct the discussion or thought by a tactfully put sentence or by asking a question. He can at the same time judge each member's personal characteristics and his point of view, which may be worth much at some other time. I believe it is a good policy to do most of your work with the different committees and then let the chairman of each committee do most of the work in the regular meetings of the full board.

One great reason why there is so much uncertainty regarding what should be the relation between the superintendent and the Board of Education and just how much or how little he should take part in board meetings is that the State laws do not define clearly just what the Status of the superintendent is. The matter is practically left to the local boards and local superintendents to work out themselves. The majority of local boards do not yet appreciate just what the superintendent's rights and privileges should be and in many cases are still trying to run the schools as their ancestors did.

The time may come before long, when the superintendent will be working under more stable uniformly recognized professional standards. I am firmly of the opinion, however, that personality will always play an important part in this work and that no matter how much tact and good judgment a superintendent uses he will oftentimes fail because it is so much a matter of personality.

"Education is an immensely valuable thing, and it is worth sacrifice. Once the youngster has learned to read and write and figure, and the simple facts of history, the world of education is before him. He can choose his way, if he is willing to make even a small sacrifice, and select the ordinary college course, the professional, or the ever more popular and practical technical schooling," so says the editor of the Gazette-Herald, Kenny, Ill.

"The American school system does at least this for every one. It gives him a start. The rest is up to him, and that is all any man has a right to ask."



CENTRAL FALLS ESTABLISHES NEW RECORD IN EVENING SCHOOL WORK.

An interesting report of the night schools of Central Falls, R. I., has been prepared by Supt. R. K. Bennett. The report is valuable to school authorities in that it reflects the methods which were successful for promoting the attendance at the school and for maintaining it.

The report shows that the average attendance for the sixty-eighth session was 446, an increase of nearly 60 per cent over that of a year ago. The total registration reached 1,020. The attendance was maintained in spite of the weather conditions, the high wages paid to unskilled labor and the labor conditions in the local plants.

It is conceded that the phenomenal growth of the evening schools during the past year has been due principally to the efforts put forth by the school department to increase enrollment. The school officials made a definite campaign in the fall to make the schools more attractive and efficient, and used every possible means to encourage citizens to avail themselves of the opportunities offered in the evening schools.

In this direction, nine definite methods were employed to acquaint men and women, boys and girls, with the training offered in the evening schools. These are:

- 1. Reading notices and advertisements printed in the English and French newspapers.
- 2. Special stereopticon slides shown between reels at the motion picture theaters.
- 3. Window eards in English, Polish and Syr.an exhibited in store windows.
- 4. Typewritten circular letters distributed to churches and societies telling the members about the evening school classes.
- Messages sent to parents thru the day school pupils.
- 6. Mimeographed sheets distributed at the factory gates and placed in library books at the public library.
- 7. Personal letters mailed to last year's evening school grammar graduates, urging them to attend the high school classes.
- 8. Personal letters sent to each boy and girl who withdrew during the previous twelve months to enter industry.
- 9. Special letters of invitation to persons who had declared their intention of becoming citizens.

In order to secure a high average attendance, the evening school officials endeavored to make the work one hundred per cent efficient. To do this they gave the same careful attention to the night school needs which were given to the day schools. For instance, one evening was set aside for registration in the several buildings. Thru advance knowledge of the approximate number expected to attend, together with the courses to be pursued, the instructors were able to start with the regular, work on the first night. The plan of advance registration has now been made a permanent feature of the work.

As an aid in maintaining a high percentage of attendance thru the year, the principals and instructors in the buildings followed up the absentees with personal letters and appeals for regular attendance.

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|--------------------------------------|------------------|-------------------------------|-------|
| Psalm 107 | 1,7040 | Amaryllis | 16474 |
| Psalm 100 | 17646 | Irish Lilt | 17331 |
| Old Rounds: | | Rinnce Fada | 17840 |
| Early to Bed (2) Three Blind Mice | , Row, Row 18277 | May Pole Dance-Bluff King Hal | 17087 |
| (3) Good Night | | Minuet-Don Juan | |
| Scotland's Burning (2) Row, Row, Row | | Adeste Fideles | 18664 |
| Your Boat (3) Lovely Evening | | First Nowell | |
| Old English Singing Games: | | Rigodon (Rameau) | 67201 |
| Looby Loo | 1 | Sellenger's Round | 18010 |
| Oats, Peas, Beans | 17567 | St. Patrick's Day | 17002 |
| Jolly is the Miller | | Virginia Reel | 1 |
| London Bridge | | Money Musk | 18552 |
| Mulberry Bush | 17104 | Joseph Mine | 1 |
| Round and Round the Village |) | Lo, How a Rose E'er Blooming | 17870 |
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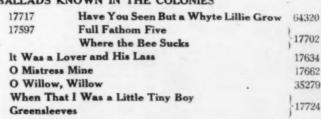
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| Airs of Ophelia | 17717 | Have You Seen But a Whyte Lillie Grow | 64320 |
|---------------------------|----------|---------------------------------------|-------|
| The Girl I Left Behind Me | 17597 | Full Fathom Five | |
| | | Where the Bee Sucks | 17702 |
| | It Was a | Was a Lover and His Lass | |
| O Mistre | | ss Mine | 17662 |
| | O Willov | v, Willow | 35279 |
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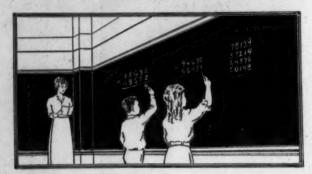


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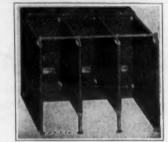
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Schools and School Districts.

The boundaries of a school district may not be changed, so as to reduce the taxable value of the property included in it after the district has is-sued bonds which are outstanding obligations, under the Texas acts of 20th legislature (1905), c. 124, ¶ 50, as amended by the acts of the 31st legislature (1909), c. 12, by appeal to the injunctive power of the court, since the court cannot do indirectly what cannot be done directly by the commissioner's court. — Harbin Independent School Dist. v. Denman, 222 S. W. 538, Tex. Com.

Where a canvassing board declared that an Where a canvassing board declared that an election under the Kansas general statutes of 1915, ¶ 9348, as amended by the Kansas laws of 1917, c. 284, ¶ 2, was in favor of a proposal to establish a rural high school, the correctness of the canvass cannot be challenged by defendants, the commissioners of the county and others, in an action by the state to enjoin an election called to vote on the disorganization of the school. State v. Board of Commissioners of McPherson County, 190 P. 594, Kans.

The provision of the Kansas laws of 1917, c. 284, ¶ 2, that, "if any rural high school district shall heretofore have voted to organize" and certain other conditions exist, an election may be the theorem of many sexist, an election may be held to disorganize it, does not authorize such an election as to any such school established after the enactment of such statute.—State v. Board of Commissioners of McPherson County, 190 P. 594,

Where four petitions for a graded common school district, which were exact copies of each other, were circulated, and more than 25 per cent

of the legal voters who were taxpayers within the boundaries of the district signed some one of the petitions, those petitions may be treated as a single petition, sufficient basis for an election to establish the district.—Hopkins v. Dick-

where the county board of education adopted a resolution approving a petition for the creation of a common graded school district, which was duly entered upon its records and was sub-scribed by chairman and secretary, and each member of the county board indorsed on petition for establishment his approval, it is held that, as the board has adopted a resolution of approval, the written approval will be deemed sufficient; the matter being only one of intellectual approval.-Hopkins v. Dickens, 222 S. W. 101,

consolidated rural school district for the purpose of a graded school, which is different purpose of a graded school, which is different from the ordinary school district, and has other powers, as furnishing transportation to pupils, can be created only as provided in the Wisconsin statutes of 1919, ¶ 40.1c, by election of voters of the proposed district; section 40.01 providing merely for the consolidation of ordinary school districts by the town board and the committee on common schools—State v. Knight, 178 N. W.

School District Government.

Under Burns's annotated statutes of Indiana, 1914, ¶¶ 5939, 5942, and in view of sections 5933, 5934, 5937, assistant to county superintendent of schools appointed by superintendent in 1911 prior to the taking effect of section 6400c, providing that board of county commissioners might authorize the county superintendent to appoint an assistant to receive as compensation not more than a stipulated amount, could not recover from than a stipulated amount, could not recover from county for services rendered in 1917 on theory of an implied agreement to pay reasonable value thereof, tho she had been paid during intervening years, where no money had been appropriated by the county council for the year 1917 to pay for such services.—Board of Commissioners of Daviess County v. Fulkerson, 127 N. E. 558, Ind. App.

The county board of education is a corporation as the trustees of a school district are a cor-poration, and must act as such, or else its acts ineffectual.-Hopkins v. Dickens, 222 S. W.

To act, the county board of education must have present a quorum of its members, and all

must have had notice and opportunity to be present.—Hopkins v. Dickens, 222 S. W. 101, Ky. Where there are two vacancies in the office of school commissioner, one for a long or regular term, and the other for an unexpired term of a member who resigned, and in a primary nominating election certain persons filed their declarations to become candidates, some for the full term and others without designating the term, application to amend declarations to indicate the term for which they desired to run, should have been allowed by board of ballot commissioner and official ballot made accordingly.—State Nuttall, 103 S. E. 398, W. Va.

School District Property.

In a deed to a school district, the phrase "for school purposes" did not create a condition subsequent.—Hanna v. Washington School Tp. of Hendricks County, 127 N. E. 583, Ind. App.
Statutory power, as in private laws of North Carolina, 1919, c. 128, given a school district to erect school building, includes the power to provide the ordinary equipment, which consists in great part of seats and desks for the pupils.—Board of Trustees of Plymouth Graded School Dist. v. Pruden & Co., 103 S. E. 369, N. C.

An agreement made between two members of

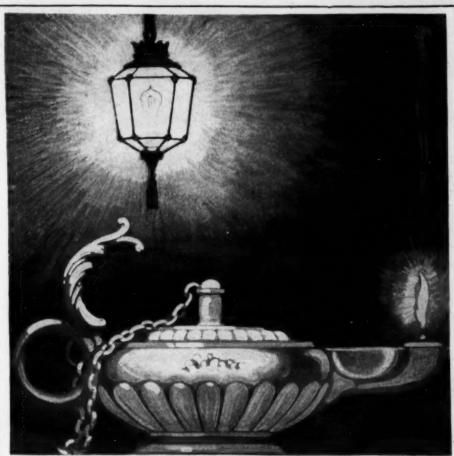
An agreement made between two members of a board of education and a third party, at a meeting at which the third member of the board is not present, and of which he has no notice, is not an "official act," within the West Virginia code of 1913, c. 45, ¶ 32 (sec. 2071), and is unenforceable against such board.—Daugherty v. Board of Education of Philippi Dist., 103 S. E. 406 W. Va. 406. W. Va.

School District Taxation.

A warrant issued by a school township for materials used in the construction of a school building constitutes a debt and an obligation to

(Continued on Page 63)







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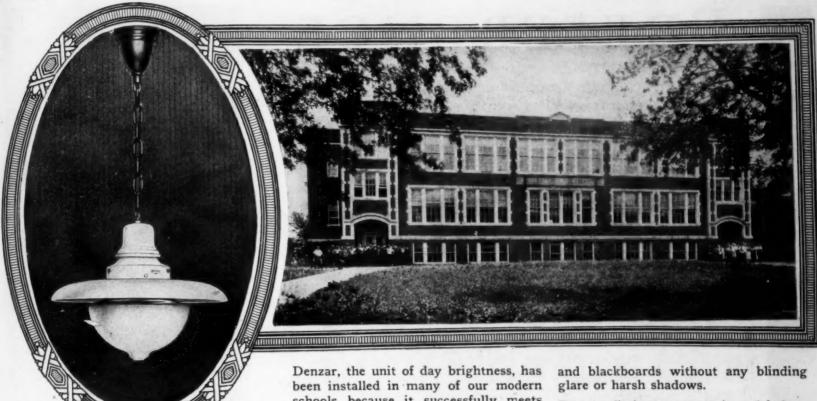
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(Continued from Page 58)

pay money on the part of the township, and is void and illegal at the time of its issuance, if it the indebtedness of the township beyond that permitted by the Indiana constitution, art. 13; a "debt," in its general sense, being a specific sum of money due from one person to an other, and denoting, not only the obligation of the debtor to pay, but the right of the creditor to receive and enforce payment.—Angola Brick & Tile Co. v. Millgrove School Tp., Steuben County. 127, N. E. 855, Ind. App.

The advisory board of a school township has no power to create or authorize the creation of any indebtedness against the township in excess of the debt limit fixed by the Indiana constitution, art. 13.—Angola Brick & Tile Co. v. Millgrove School Tp., Steuben County, 127 N. E. 855. Ind. App.

There is a distinction between the ordinary and necessary business expenses of a school township and those incurred for the erection of schoolhouses and other permanent buildings; and hence a warrant issued in payment of materials used in the construction of a school cannot be considered as having been given in payment of ordinary expenses, and is not payable from the general expense fund of the township.—An-gola Brick & Tile Co. v. Millgrove School Tp., Steuben County, 127 N. E. 855, Ind. App.

A warrant for materials used in the construction of a school building cannot be paid out of a bond fund created for the purpose of retiring an issue of bonds issued for the erection of the building.—Angola Brick & Tile Co. v. Millgrove School Tp., Steuben County, 127 N. E. 855, Ind.

Money on hand with which to retire bonds of a school township does not operate to reduce the indebtedness represented by such bonded indebtedness, and such bonded indebtedness can only be considered as reduced when the bonds have actually been retired.—Angola Brick & Tile Co. v. Millgrove School Tp., Steuben County, 127 N. E. 855, Ind. App. The North Carolina private laws of 1919, c. 128,

authorizing Plymouth graded school district to issue bonds with the consent of the voters for the erection of a school building giving commissioners power to levy sufficient tax to cover interest and sinking fund would control resolution submitting to the voters along with question of issue of bonds, whether levy in fixed amount would be made for interest and sinking funds especially where bonds were in hands of bona fide purchaser.—Board of Trustees of Plymouth Graded School Dist. v. Pruden & Co., 103 S. E.

Where under the North Carolina private laws of 1919, c. 128, relating to Plymouth graded school district, an election is held and bonds authorized, contract purchaser of the bonds can-not refuse issue because resolution calling elec-tion submitted question of a fixed levy for in-terest and sinking fund which at time was more than sufficient, tho such levy might on decreased valuation be insufficient, since such fact does not affect validity of the bonds.—Board of Trustees of Plymouth Graded School Dist. v. Pruden & Co., 103 S. E. 369, N. C.

The levy of a 50-cent maintenance tax on \$100 valuation of property of newly added portion of the school district as against the levy of a 35-cent maintenance tax on property in the old district is held discriminatory against newly added portion, the an additional 15-cent tax was levied on property in the old district for sinking fund to retire bonds of the old district.-Millhollon v. Stanton Independent School Dist., 221 S. W. 1109, Tex. Civ. App.

The Texas local and state laws, 35th legislature of 1917, c. 128, creating the Stanton independent school district without specially providing for the ordering of an election to determine whether there shall be levied a maintenance tax under the Texas constitution, art. 7, ¶ 3, and Vernon's Sayles annotated statutes of 1914, arts. 2857, 2877, are held to confer upon the trustees the right to call such election, under section 19 of the act of 1917, making it the trustee's duty to levy and collect maintenance tax, and section 23, confer-

ring upon the trustees the rights, powers, privileges and duties imposed upon the boards of trustees of independent school districts by the general laws of the state.—Millhollon v. Stanton Independent School Dist., 221 S. W. 1109, Tex. Civ. App.

In view of the Texas revised statutes of 1911, arts. 957, 958, 961, 7626-7628, under article 2853, conferring the power of taxation on the trustees of the independent school districts, an independent school districts, an independent school district by a levy of the tax by the collector acquired a lien on personal property within the district.—Mission Independent School Dist. v. Armstrong, 222 S. W. 201, Tex. Com. App.

Under the Texas revised statutes of 1911, art. Under the Texas revised statutes of 1911, art. 2853, conferring the power of taxation on the trustees of the independent school districts, in view of article 958, incorporated by reference, which does not fix a specific date when the lien of taxes on personalty shall attach, the lien created by a school district's tax levy attached and became an incumbrance on the property as soon as the assessment was made.—Mission Independent School Dist. v. Armstrong, 222 S. W. 201. Tex. Com. App. 201, Tex. Com. App.

Where to satisfy a tax lien on personalty creed by an independent school district's assessment, the tax collector levied on and advertised it for sale, to prevent which a purchaser at the sale under a deed of trust gave the bond to release a levy required by the revised statutes of 1911, art. 7626, on the taxes becoming due the purchaser would be lightly under the bare. purchaser would be liable under the bond for the amount of taxes it was given to protect.— Mission Independent School Dist. v. Armstrong. 222 S. W. 201, Tex. Com. App.

A creditor of a school district cannot object to the transfer of residents to another district and the crediting of their revenues to the second district, where there is no showing that such transfer will diminish the revenues of the district to the extent that they will be insufficient to pay the debt.—Ancient Order of the United Workmen v. Paragould Special School Dist. No. 1, 222 S. W. 368, Ark.

PREFERENCE

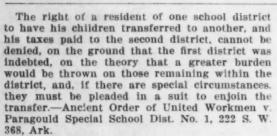
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Teachers

In view of the New York State Education law. §§ 865-881, as added by the New York laws of 1917, c. 186, giving educational boards the power to create the necessary position of teachers, and the power to appoint thereto, and sections 882-889, as added by the New York laws of 1919, c. 645, giving such boards the power to fix salaries, a city council has no power to limit the number of employes of the educational department below that thought necessary by the board, since such power would constitute an indirect veto on the power the legislature has conferred on the board of education.—Emerson v. Buck, 182 N. Y. S. 385,

The Arkansas acts of 1919, No. 553, ¶ 1, empowering a certain named special school district to charge tuition at the discretion of the school to charge tuition at the discretion of the school board, are held unconstitutional as violating the state constitution, art. 14, ¶¶ 1-4, providing for a free public school system, the terms "public schools" or "common schools" being used in the constitution to denote that such schools are open to all persons within the approved ages and do not indicate the grade of the school or what may or may not be taught therein.—Special School Dist. No. 65, Logan County v. Bangs, 221 S. W. 1060. Ark. 1060, Ark.

LEGAL NOTES

The New Ulm, Minn., school board has secured an opinion from the attorney general of the state to the study of foreign languages in the The opinion says:

"The school board of a common school district a unanimous or majority

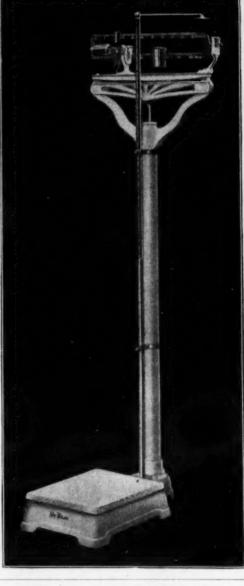
of the board make the study of a foreign lan guage compulsory. The statute authorizes the giving of instruction in foreign languages in common schools, not to exceed one hour each day by the unanimous vote of the trustees. A majority vote of the board in this respect is, of course, not sufficient.

A law permitting township trustees to build suitable homes for school teachers is urged by the Indiana State Teachers' Association.

In Missouri legislation is urged providing for larger school units, for larger revenues for rural schools, physical education, higher standards for teaching certificates, and a minimum wage for teachers of \$100 per month.



The Fourth Annual Roll Call for Red Cross Memberships will take place during the month of November.



NEWS OF SUPERINTENDENTS.
Mr. H. E. Bowman has been elected superintendent of schools at Mena, Ark.
Mr. George W. Hug, superintendent of schools at McMinnville, Ore., for the past four years, has been elected as head of the schools at Salem, Ore., to succeed Mr. John W. Todd, who resigned.

The salary of Superintendent Shambach of the Berwick, Pa., schools has been increased to \$3,000

Mr. Charles H. Fullerton and Miss Marie Gugle Mr. Charles H. Fullerton and Miss Marie Gugle have been reappointed assistant superintendents of schools at Columbus, O., at an increase in salary of \$500 each for an additional year.

Prof. Omar Bittner has been elected superinterdent of schools at McMinnville, Ore., to succeed Prof. George W. Hug.

Superintendent C. J. Naegle of the Corry, N. Y., schools has resigned to become superintendent of the state of the stat

of the state normal school at East Stroudsburg.

Mr. Albert L. Barbour, for eleven years superintendent of schools at Quincy, Mass., has been elected to a similar position at Haverhill, Mass., at a salary of \$6,000 for one year.

Superintendent M. K. Weber of Asheville, N.

C., has resigned his position.

Mr. Aubrey Smith, for many years superintendent of schools in various cities of Oregon, has been elected as head of the schools at Medford, Ore., to succeed Mr. Davenport, who resigned.

Mr. Lee Byrne has been elected supervisor of high school instruction in Dallas, Texas. Dallas has four high schools and is shortly to build a

Superintendent Geo. E. McCord of the Springfield, Ohio, schools has been given an increase in salary of \$1,500, making it now \$5,500. Mr. Clayton M. Negus, of Des Moines, N. Mex.,

has become superintendent of schools at Hurley, with an increased salary.

Mr. George E. Caswell has been elected super-intendent of schools at Haverhill, Mass.

Mr. George M. Crutsinger, superintendent of schools of Victoria County, Tex., has resigned to become a member of the faculty of the North Texas State Normal School.



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 (b) Morning Mood (Excerpt) (Grieg) Played by Columbia Miniature Orchestra
 (a) Minuet (Excerpt) (Boccherini).
 (b) Andantino, "Raymond" (Thomas) Played by Columbia Miniature Orchestra A-3094 10-in

(a) Lullaby (Mozart). (b) Cradle Song (Schubert)
Played by Columbia Miniature Orchestra
(a) Sleep Baby, Sleep. (b) Rock-a-bye Baby
Played by Columbia Miniature Orchestra

(a) Soldiers' March, "Faust" (Excerpt) (Gounod). (b) March, "Nut-Cracker" (Excerpt) (Tschaikowsky)

Played by Columbia Miniature Orchestra

(a) Parting March, "Lenore" (Excerpt) (Raff). (b) March (Excerpt) (Bach-MacDowell) Played by Columbia Miniature Orchestra

(a) Fantasy Piece, Opus 26 (Schumann). (b) With Castanets (Reinecke) . Played by Columbia Miniature Orchestra (a) Gavotte, "Circus Renz" (Fliege). (b) Gavotte, "La Mignonne," Opus 79 (De Koven)

Played by Columbia Miniature Orchestra

(a) Minuet, "Don Juan" (Excerpt) (Mozart). (b) Swiss Maid Played by Columbia Miniature Orchestra (a) Scherzo, Opus 27, No. 1. Allegretto and Trio (Schubert).
 (b) Waltz, Opus 26, No. 1 (Koschat)
 Played by Columbia Miniature Orchestra

(a) Idyll, Opus 11 (Koschat). (b) Allegretto, "March Heroiques," Opus 40, No. 3 (Schubert)
Played by Columbia Miniature Orchestra
(a) Trio, "March Heroiques," Opus 40, No. 2 (Schubert). (b)
Etude, Opus 75, No. 4 (L. Schytte)
Played by Columbia Miniature Orchestra

(a) March From Opus 17, No. 3 (Schubert). (b) Entrance March, "Christmas Tree" (Gade)
Played by Columbia Miniature Orchestra (a) March from Opus 40, No. 5 (Schubert). (b) Soldiers' March (Schubert) Played by Columbia Miniature Orchestra

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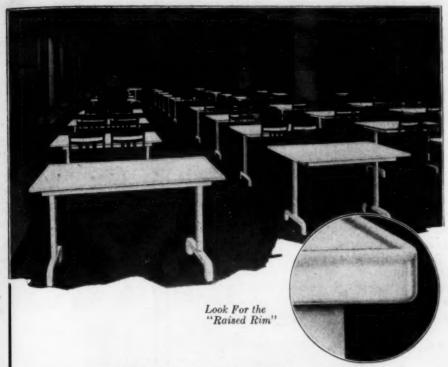
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California Girls Exceed Boys in Schools.

That the girls in California are getting a better education than the boys was the statement of Sam C. Cohn, statistician in the office of Will C. Wood, superintendent of public instruction.

Wood, superintendent of public instruction.

While there are actually more boys in California than girls, Cohn said, in the eighth grades of the public schools there are enrolled 21,602 girls and only 21,059 boys. In the high schools a much greater disproportion is shown. "Some gloomy prophets declare this means the relegation of the male of the species to second place," tion of the male of the species to second place, said Cohn.

May Hold School in Circus Tent.

The Pomona, Calif., board of education is seriously considering purchasing a circus tent in which to carry on the physical education classes which are required by state law. There is no provision made by either state or county to supply the money for a permanent structure. Supt. Guy V. Whaley knows no other solution. The board is planning a new high school within the year, so a permanent structure is not deemed necessary. With the time for physical education nearly doubled by the state law, the present buildings are not large enough to take care of the large classes which will be formed.

State of Washington Would Appoint School Chiefs.

Recommendation that the practice of electing county superintendents of schools be abandoned featured a report of the Washington State school code commission, which completed a two-day

ession recently at Olympia, Washington, consession recently at Olympia, washington, con-sidering school government with a view to re-porting to the legislature. In pointing out why a county superintendent should be appointed in-stead of being elected, the commission says:

"Originally the county superintendent of schools was primarily a clerk; today he is judged by the degree to which he delegates the simple clerical work of the office to a subordinate and becomes the real educational leader in his county. He must be able to select and recommend teachers; to evaluate methods of instruction, to hold examinations, to conduct surveys and interpret the results, to organize, stimulate and direct all the educational forces of his and direct all the educational forces of his county. Such service to be effective demands education, professional training, skill and experi-ence." The report sums up the situation as

"The commission believes that under the present system the county children are not getting a square deal. It believes that one of the things the schools most need is a profession of county superintendents divorced from partisan politics, offering opportunity for effective leadership, a reasonable salary and prospect of promotion. After 31 years under our present system there is no profession of county superintendence in the state and no promise of such a profession. The position is of such importance that it should offer opportunity for a life's work. The commission hopes to evolve such a plan as will provide equal educational advantages for all children, rural as well as urban; such a plan as will give the county superintendent adequate assist-ance, a longer tenure, a reasonable salary and opportunity for promotion."

BUSY SUPERINTENDENTS.

Oak Park, Iil. Banking machines have been installed in the public schools to encourage thrift among the children. The plan has been incorporated under the direction of Supt. W. J. Hamilton.

Appieton, Wis. A special committee has been named to conduct a survey of the school system as a means of determining which plan of organi-

zation is the better. It is the purpose of the board to substitute the union system for the present district plan and to construct the new buildings in accordance with the decision.

Colorado Springs, Colo. The school system is to be studied by a group of government experts to determine necessary improvements in grouping of students, buildings, study and recreation.

ing of students, buildings, study and recreation.
State Supt. T. E. Johnson of Michigan, during the first month of the fall term, conducted classes in a typical rural school of Clinton County. In addition to teaching, he spent the week-ends in his office and gave each Wednesday to conferences with the state board of auditors. The experiment had for its purpose a study of improved methods in rural schools that the methods in rural schools thru the use of intelli-gence tests and proficiency measurements. It was also the purpose to work out a practical method of handling the project method of teach-ing, and to show the desirability and value of trained teachers

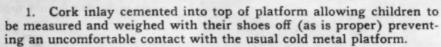
Governor Harding of Iowa urges that the legislators of that state bear in mind that better sal-aries must be provided for both teachers and county superintendents. He urges that teachers be hired for a twelve months' period and a law permitting the tenure to be extended beyond a year. He also recommends a simplification of year. He also the school laws.

The Pennsylvania State Department of Educa tion has created a bureau of attendance which will make an effort towards securing attendance of school children thruout the state.

Inaugurating a campaign for more beautiful school grounds in Ohio, Mr. Vernon M. Riegel, state superintendent of public instruction, has sent letters to superintendents thruout the state. Riegel urges that a drive be made this year improve the physical surroundings of the school buildings in city, village, consolidated and rural districts. In setting forth a program of school ground beautification the state department has in mind a sane approach and does not expect that the activities shall be incommensurate with the financial resources of the school or dis-trict. No matter how handicapped the school

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may be financially, something worth while can be achieved. The centralized rural school, it is pointed out, has an unusual opportunity to improve, being nearly always amply provided with space for both lawn and playground.

Philadelphia has been scouting for a school superintendent. The newspapers cry "salary no

Model No. 214

superintendent. The newspapers cry object; get the right man."

object; get the right man."

There is no value in reporting school rows, except perhaps to indicate what may happen if school board members lend themselves to political or religious prejudice. Newtown, Conn., has been afflicted for several years with a school feud. Democrats and Republicans, Protestants and Catholics, highbrows and "political paupers" who have found their way into the school committee have been more concerned in airing their chartenmings than in promoting the welfare of shortcomings than in promoting the welfare of the pupils.

Recently the school committee, consisting of six members, resigned in a body. A new committee was elected, but the animosities continue. The old committee members will continue to

The old committee members will continue to fight the new. There are many somebodies who must get even with somebody else.

The school board of Wadesboro, N. C., declined to make a school levy sufficient to provide a six months' school year. Legal proceedings have been instituted to compel the board to make the levy. The suit is a friendly one intended to clear up

President J. H. Umbehen of the Pottsville, Pa., school board objects to the adoption of school histories which omit the chapter on the American Revolution.

An increase in the number of candidates for county school superintendent thruout the state of Indiana is expected next June as a result of the opinion of Attorney General Stansbury holding that a 36 months' high school license meets the legal qualifications for the office. Superintendents will be elected on the first Monday in June, to take office Aug. 15.

Prior to the opinion of the attorney general.

it was considered necessary to hold a state 36 months' common school license or license of higher grade to meet requirements of the office. Licenses of higher grade include professional and life state licenses granted by the state board of education on examination. The life state license granted on the basis of experience and professional training does not meet the requirement.

In addition to the license requirement it is necessary to have been engaged in teaching in the state for at least two years

At many elections in the past only one person in the county has been eligible for the office under the old requirements. The new ruling opens the field to high school teachers, many of whom are expected to become active candidates for the office, according to officials.

Election of the superintendents is made by the township trustees of the counties. Many Indiana many have held the office for several transa. The

men have held the office for several terms. The salary of practically all superintendents was in creased under recent legislation providing that a raise of not more than \$1,000 could be granted on petition of freeholders and approval of the

The Harrisburg, Pa., school board has elected a nurse for the schools.

The school nutrition work will be amplified by the Springfield, Mass., school authorities. The regular weighing and measuring of pupils will not only be continued but greater attention will be given to nutrition classes and the inculcation

of health habits at school and at home.

The public schools of Boston are doing much to combat malnutrition. Commencing in 1909, the pupils in the first grades were weighed and measured. Dr. William T. Porter, of the Har-vard Medical School, who has compiled data from

vard Medical School, who has compiled data from the records of the children, announces that the results of the study will be given to the public. Rutland, Vt. Medical inspection of school children has been continued this year under the direction of the inspector and school nurse. During the present year, each child will be examined at least once for evidences of disease or physical defect. The work of the medical department for the present year is cause for general satisfaction. the past year is cause for general satisfaction, in that eighty per cent of the suggestions of the inspector or nurse were followed out by the parents. The work has had the hearty cooperation of the superintendent, the board of education, the teachers, the patrons and the children.

Superintendent Milton J. Fletcher of Jamestown, N. Y., has announced his program for the present school year. He urges greater application of measuring tests, strengthening of vocational schools, special school for retarded pupils, school gardens and health work in the schools.

Indianapolis, Ind. Under a new plan adopted by the board, textbooks are sold at the several school buildings instead of at the local retail stores. The plan eliminates a textbook shortage and is accomplished without profit, either to the schools or the dealers. The expense of distribu-tion and transportation is estimated as about equal to that connected with handling the books in retail stores. The board places orders only for a sufficient supply to meet the actual demand.

Cleveland, O. The schools face a delay in the distribution of new books because of a decision of the school board to hold the schoolbook companies to contract prices. A few cities, upon the request of the companies, have released the latter from their contracts. The Cleveland authorities from their contracts. The Cleveland authorities hold that the companies should live up to their contracts pending the final settlement of the matter in court.

HYGIENE AND SANITATION.

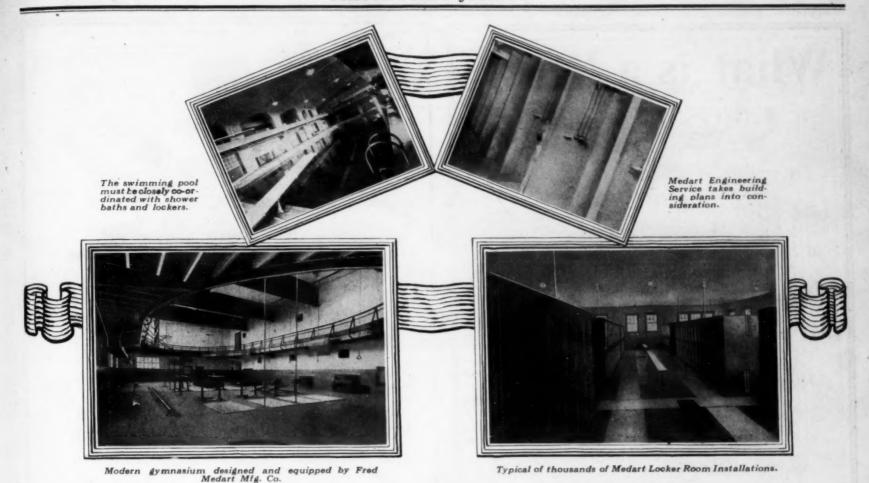
The public school nurse of Rockford, Ill., wi hereafter have the full power of a police officer.

hereafter have the full power of a police officer.

Glen L. Swiggert, specialist of the Federal Educational Bureau of Washington, strongly advocated a general survey of educational conditions in the state of Indiana, at a meeting held in the office of L. N. Hines, superintendent of public instruction, Oct. 4, for the purpose of providing better commercial training in colleges and high schools, thereby paving the way to a better business life in the State.

The meeting was attended by E. U. Graff, superintendent of city schools; L. P. Benezet, Evansville; J. J. Pettijohn and Professor Logan, both of Indiana University and O. H. Williams,

The proposed survey of school conditions also would include the business houses of the state where it is believed the kinds of training essential to business needs will be found.



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(Signed) Charles W. Kline, Superintendent, East Independent District, Waterloo Public Schools, Waterloo, Iowa.

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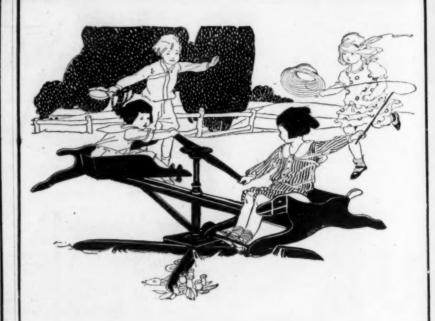
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ADOPTS NEW RULES.

The board of education at Atchison, Kans., has recently adopted a new set of rules defining the functions of the superintendent of schools, of the special supervisors and of the principals. The code is intended as a guide for these authorities in their everyday work and also as a means of controlling the relations, the duties and the rights of these authorities in their dealings with the board of education, with the teachers, pupils and patrons of the schools.

The rules concerning the special supervisors

The rules concerning the special supervisors are of considerable importance in that they are the first logical codification of rules for this comparatively new type of school official. In most cities, the school boards and the superintendents have been unwilling to definitely state the powers and the limitations of the special supervisors because their duties have not been standardized and the character of the work has not been uniform. The rules read:

Division III. Superintendent of Instruction.

Sec. 1. The superintendent shall be the professional head of the educational system, and may take such measures as he deems expedient to insure efficiency and progress in same. He shall have general supervision over all schools and perform all duties prescribed by law, or provided in these regulations.

shall have general supervision over all schools and perform all duties prescribed by law, or provided in these regulations.

Sec. 2. It shall be the duty of the superintendent to cooperate with all principals and teachers for the purpose of promoting the interests of the schools by securing better instruction, more progressive administration and general improvement thruout the system. To these

ends he shall visit the different rooms as often as feasible and make such suggestions and corrections as he deems necessary.

Sec. 3. The superintendent shall call such meetings as are required to aid in the administration of his office, and may require the presence of all principals and teachers at such meetings. Excuses for absence or tardiness may be accepted or rejected as the superintendent thinks they are or are not legitimate, and failure of principals or teachers to attend meetings without acceptable excuses shall be construed as lack of interest in the work and neglect of duty. All must be officially notified at least 24 hours before such meetings, except in cases of pressing emergency, when such notifications shall be given as far in advance as possible.

Sec. 4. The superintendent shall prepare and submit to the board of education such reports as that body may demand. He shall furnish the board with a report on the abilities of the different teachers and principals on or before the regular meeting in April of each year, stating the qualifications of each regarding efficiency of instruction, personality, influence in the school, ability to lead young people, and any other data deemed desirable in such a report. He shall each year make a general report covering all phases of the school system, which report shall be in the hands of the board not later than the first Monday in August of each year. In accomplishing this work the superintendent may require such reports from principals and teachers as are needed to complete the same. He shall furnish any other reports called for by the board of education from time to time.

of education from time to time.

Sec. 5. In view of the fact that modern educational progress demands that the schools be closely correlated with all leading, progressive developments thruout the country, the superintendent may visit the systems of other cities for the purpose of acquainting himself with their methods, and may attend conventions of the department of school superintendence, so far as to keep abreast of the times on educational matters, and his expenses for such travel shall be paid by the board of education.

Sec. 6. The superintendent in conjunction with the principals and supervisors, shall devise and cause to be printed and distributed, any blanks, records or forms needed in the schools, and he shall supervise, thru his subordinates, the proper filling out and return of such blanks.

Sec. 7. The superintendent shall certify to the clerk any irregularities in the payroll or extra compensation due teachers or other employes.

Sec. 8. It shall be the duty of the superinten-

Sec. 8. It shall be the duty of the superintendent to secure such teachers and principals, supervisors or librarians as the system requires and to recommend that they be employed by the board. He shall assign such employes to positions and arrange for them to properly sign contracts.

Sec. 9. The superintendent shall have charge of all cases of indigence after they have been properly reported by principals, and shall make provision for same according to law.

Sec. 10. The superintendent shall have author-

Sec. 10. The superintendent shall have authority to transfer pupils from one school to another, and no pupil may be transferred without his permission, except in cases where the home of the child has been changed from one district to another, when the principal of the former school may grant the transfer.

of the child has been changed from one district to another, when the principal of the former school may grant the transfer.

Sec. 11. The superintendent of schools, who shall not be a member of the school board, shall be elected by the board of education at such times as deemed expedient by the board, for a period of either one or two years. His term shall begin on the first Monday in August, and his educational qualifications shall conform to the laws of the state.

Sec. 12. The superintendent shall hold office from term to term, at the pleasure of the board of education, provided that due notice shall be given at the regular meeting in February if either of the contracting parties desire to terminate the contract. The superintendent may be discharged, upon thirty days' notice, for incompetency, malfeasance or willful neglect of the duties set forth herein.

Sec. 13. On or before the regular meeting in August the superintendent shall, with the assistance of the clerk, prepare the budget for the

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attention has been given to lighting and ventilation. If you want to sell the building or use it for something else later, it will bring nearly 100 cents on the

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next school year. Each specific appropriation shall be itemized as fully as possible. The super-intendent shall be responsible for the proper accounting and disposition of all funds, and is charged with the economical administration of same. He shall not change money from one appropriation to another without action by the board of education.

Division IV. Principals.

The principal shall be recognized as Sec. 1. The principal shall be recognized as the administrative head of the school over which he presides, subject to supervision by the superintendent and by the board thru the superintendent. He shall have general oversight of teachers, pupils and janitors, and is responsible for the care of buildings and grounds. The decision of the principal must prevail on matters pertaining to the management of his school.

Sec. 2. The principal shall make and enforce any rules and regulations required for proper supervision, at the noon hour or other times, of corridors, lunch rooms, gymnasiums or any other

part of his building.

3. Principals shall keep in close touch with the work charged to them, and to this end may visit the various teachers as often as desirable, or hold meetings to facilitate the same.

Sec. 4. Principals may suspend any pupil who persistently violates the rules of the school, or whose conduct in or around school is of such a nature as to lower the standards set by the in-stitution. In all cases of suspension the superintendent, together with the parents or guardian, must be immediately notified; the particulars of the case with definite reasons for suspension being given. Any pupil thus suspended will not be reinstated, except by permission of the prin-

Sec. 5. It shall be the duty of each principal to provide a lunch room in his building, and no pupil will be allowed to lunch in any other part of the building except by special permission of the principal.

Sec. 6. The principal shall investigate the records of and classify all new pupils, and in conjunction with teachers and superintendent promote pupils to a higher grade, or demote them,

if the best interests of the child and school demand such action. In all cases of demotion the parent or guardian must be notified and consulted, if possible, before such action is taken.

Sec. 7. The principal is held responsible for

all meetings, entertainments, parades, or affairs of like nature held by teachers and students of his school, and may regulate or abolish the same.
All school activities must have the principal's sanction before being initiated.

Sec. 8. The principal is charged with the en-

forcement of all orders and instructions from the board of education or superintendent, and will see that all records are neatly and accurately

Sec. 9. The principal shall oversee admittance of visitors, calling students by telephone, etc., and may make such rules as he sees fit for regulation of such.

Sec. 10. Principals shall report all cases of indigence, where pupils are unable to buy books, Sec. 10. to the superintendent after they have been reported to him by teachers as provided in division 6, section 18, of these regulations.

Sec. 11. Principals shall see that the American Flag is raised each day on the school

Sec. 12. Principals shall conduct such fire rills as they deem necessary, but such drills

should be given at least once each month.

Sec. 13. It shall be the duty of principals to collect and turn over to the clerk at the close of chool, all keys and other property belonging to the school.

Sec. 14. Principals shall see that a copy of these rules is in the hands of each teacher in their respective buildings, and that the same are enforced.

Sec. 15. Principals shall arrange for the purchase of diplomas, the proper observation of graduation ceremonies, including the speakers to deliver proper addresses, and other details incident to the occasion.

Sec. 16. It shall be the duty of the high school

principal to determine at the completion of each school year, the four highest ranking students of the senior class. In making this ranking the grades for four years shall be considered, and

the student having the highest mark shall be known as the valedictorian of the class, and the others shall rank as second, third and fourth, depending upon their respective marks.

Sec. 17. Each principal shall collect and turn over to the clerk of the board of education,

all tuition due from the pupils in his building.

Division V. Special Supervisors.
Sec. 1. The superintendent may, with the anction of the board, secure and place in charge of the various departments such special supervisors as the best interests of the schools demand. Such supervisors shall be employed in the same manner as other teachers, and their salaries fixed by the board.

Relation to Superintendent.

Sec. 2. The supervisors shall be directly responsible to the superintendent, and shall seek to execute his policies concerning classroom in-

struction and the methods employed therein. Sec. 3. Supervisors shall confer with the superintendent from time to time in order that plans may be formulated, and shall make reports of work done in the schools at least once each half year. Special reports on work observed or general conditions shall be made on request from the superintendent.

Sec. 4. All reports made by supervisors concerning work of other teachers shall be treated as strictly confidential and may be used by the superintendent in making his report to the board of education.

Relation to Teachers.

Sec. 5. Supervisors are vested with authority to correct, suggest or demonstrate to any teacher for the purpose of improving the quality of the work.

Sec. 6. Supervisors shall use any of the following methods for improving the quality of teaching: 1. Visits.

The supervisor shall observe at least three complete lessons each semester in each room. If this is not completed two weeks before the close of the semester, it is the duty of the teacher to notify the supervisor in writing of the fact.

(Concluded on Page 75)



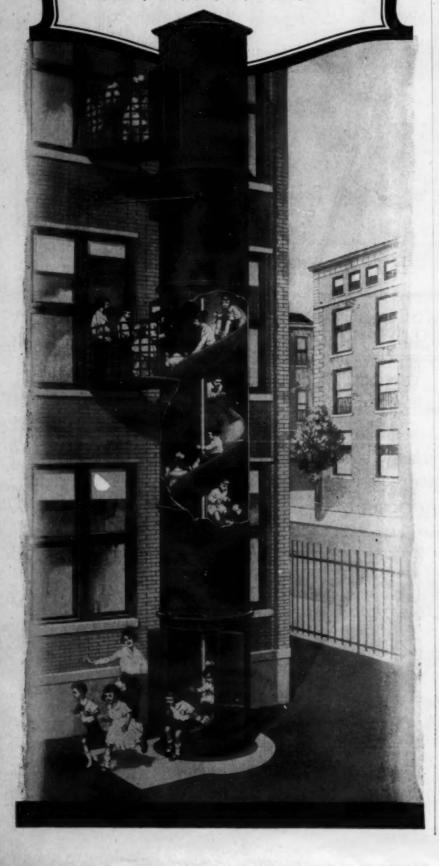
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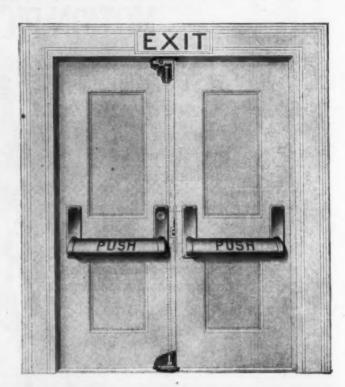
The superiorities of Kirker-Benders over the old fashioned step escapes are primarily—the increased ease and speed with which a building can be emptied; the unconscious and helpless may be sent to the ground without aid; being enclosed in steel walls, the protection from flames belching forth from lower floors is positive; may be installed within the walls of a building as well as outside, with an exterior exit.

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Sargent Fire Exit Door Bolts, Locks and Hardware are sold by representative dealers in all cities.

SARGENT & COMPANY, Manufacturers

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(Continued from Page 72)

2. Conferences. The supervisor shall hold at least three conferences with each teacher in each semester in order to give constructive criticism. If possible these conferences shall be held at the close of the recitation, but the teacher may

the close of the recitation, but the teacher may be asked to come to the office.

3. Teaching. The supervisor may take a class at any time for a lesson, or series of lessons, for the purpose of demonstration, to gain a knowledge of the condition of the class, or for the purely selfish motive of wanting to teach.

4. Lesson Plans. The supervisor may ask for lesson plans and have lessons taught for observation, whenever special effort is being made

servation whenever special effort is being made to improve the teaching in any certain subject. Teachers asked to plan and teach such lessons shall be notified at least 24 hours in advance.

5. Visits of Teachers. Supervisors may arrange to have teachers visit each other for purposes of improvement. The object of the visit shall be clearly explained to both teachers beforehand, and if possible the supervisor shall be present and hold a conference with both teachers at the close of the visit.

6. Meetings. Supervisors shall call group

meetings to discuss matters of interest to the whole teaching force or any certain group. Teachers are expected to attend and take part in such meetings provided they are duly notified of such

Relation to Principals.

Sec. 7. Principals shall cooperate with the supervisors in their efforts to improve the quality of instruction. They shall report to the supervisors concerning the instruction observed in order that the supervisor may plan the work more intelligently. The supervisor shall report all visits to the principal before leaving the building.

Sec. 8. The supervisors shall cooperate with each other in every way possible in order to unify the work. They shall help carry out the projects of other departments whenever possible.

RULES AND REGULATIONS.

Detroit, Mich. Under a new rule of the board, teachers of industrial, manual and household arts are responsible to the principals of their

respective schools the same as other teachers. Teachers of this department may be assigned to hall, playground or any duty pertaining to the general organization of the school.

No teacher may dismiss a class from a regular

lesson without first consulting the principal of the school in which the center is located.

The teacher must not leave the shop or domestic science room while the class is present.

Orders for supplies kept in stock must be made out on triplicate requisition blanks and must be signed by the principal of the school.

THE INDIANAPOLIS SCHOOL MUDDLE.

A special investigation of the business affairs of the Indianapolis board of education has been recommended by J. E. Eschbach, chief examiner of the state board of accounts, as a result of dis-Closures made in a report of the field examiners. The report contains an exhaustive analysis of the financial transactions of the schools and points to alleged violations of the rules and other irregularities in connection with certain work done at one of the schools.

The report recommends that a general revision of the accounting system be made in view of the fact that the general accounts appear to be little more than an analysis of the treasurer's trans actions. To obtain the necessary results, the examiners hold that the following requirements must be met:

Schedules of revenues and expenses must be substituted for the detailed statements of cash receipts and disbursements.

2. Proper statements of revenues due but not collected, and of accrued liabilities, as well as the balances to fund accounts, must be provided in the balance sheet form in order to exhibit

the present financial standing.
3. Subsidiary ledgers should be properly controlled by means of general ledger accounts, and should be proved periodically to afford an in-

ternal check on operations.

The practice of furnishing pupils with free pens, pencils and art supplies is scored. It is charged that officials in charge of the payroll have deducted amounts owed by employes for coal purchases. This practice results in errors in the payroll. The latter should be on a cash

basis, the employe getting in cash what is due

him from the city and paying his own bills.

It is recommended that there be a general revision of the laws of the state concerning school cities and that laws be worked out so that all school corporations are operated on the same

The report disapproved the methods used by officials in making payments on bonds and interest thru an outside bank. Large sums of money have been sent to this institution weeks in advance of the date of payment. This practice, it is said, results in a loss in depository interest to the school city and gives the outside institution interest and principal of bonds which are never presented for payment. It is recommended that all bonds be made payable at the office of the treasurer of the corporation and that the treasurer receive the canceled bond or coupon before he is entitled to credit for disbursement.

Recommendations for placing the handling of stores and supplies on a business basis are made in the report. It is pointed out that many mate-rials at present are simply under the super-vision of a clerk, who delivers them upon request, but keeps no record of their destination or

TEACHER SHORTAGE AND SALARIES.

"Ra'se teachers' salaries and get the money afterwards" is the slogan at Reading, Pa.

A flat increase of equal amounts in salaries is demanded by the Philadelphia council of teachers. The school board holds that the increase fill be contingent upon the sale of a two million dollar bond issue.

The state of Iowa reports a shortage of 1,200

Milwaukee, Wis., opened schools with a full complement of teachers.

The school board of Aberdeen, S. D., has secured two resident buildings in which to house teachers. The landlord school boards will rent the rooms to the teachers at cost.

The Patriot, a daily newspaper published at Harrisburg, Pa., denies the charge that the teachers are deserting their posts. There is no teacher shortage in that city.

Simplicity

Durand Steel Lockers show their superiority of design in their simplicity of construction.

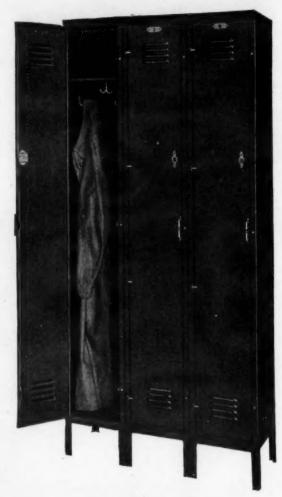
This kind of simplicity is the result of years of study and experiment.

It not only means handsomer appearance and greater cleanliness, but greatly increased strength, rigidity and durability.



1521 Ft. Dearborn Bank Building Chicago, Ill.

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(Concluded from Page 56)

nished to all pupils, without charge. were no charges or fees of any kind. Rules and regulations regarding evening school teachers and their work were formulated and adopted.

A course of study was drawn up and teachers were required to keep plan books in which were written assignments and outlines of each lesson, time schedules of the evening's program and seat plans showing the names and placement of the pupils in the respective rooms. In most of the buildings, chorus work in community singing was conducted once each month.

For the benefit of the Americanization teachers who had not previously taken special courses for their work, a three-lesson course in methods of teaching foreigners was given at the high school under the direction of the state supervisor of Americanization work. A talk on Americanism was given one evening by a school board member for the benefit of men and women in the Americanization classes

The high school classes held closing exercises in the high school building while the grammar schools held combined graduation exercises at one of the local halls. Following the program of exercises, 52 diplomas and 77 certificates were

In the opinion of the evening school instructors and the school administration officials, the success of the 1919-20 evening school season was due to the intensive advertising which secured a large enrollment, and to the efficient methods of administration which maintained a high average of attendance.

Philadelphia reports a damage of \$15,000 in schoolhouse windows broken by mischievous boys. Their marksmanship may have been good but they missed the true aim of American boy-

AMONG BOARDS OF EDUCATION.

The board of education of Washington, D. C., proposes to hold closed sessions in the future as it has in the past. President Dr. Abram Simon recently stated: "As a general practice the abolrecently stated: "As a general practice the abolishing of closed sessions is a good thing, but there are certain matters which the board cannot discuss publicly. Among these are matters which relate to the character of members of the

school-teaching force."

The school board of Polk County, Florida, was removed by Governor Catts on the charges of "mal-feasance, non-feasance and mis-feasance" in

Simon Gratz, who has been a member of the Philadelphia board of education for more than

Philadelphia board of education for more than a balf century, has announced his resignation.

The teachers of Cleveland want a teacher on the school board. The discovery was made, however, that no one in the pay of the school system can be a member of the board.

New Jersey has since 1914 observed the so-called "Educational Sunday," setting aside the second Sunday in October for that purpose. On

that day the relations between the school and the home and the church are discussed.

Suit against the board of education of Cincinnati, O., has been filed by Mr. F. W. Engelhardt,

discharged teacher, asking for \$7,500 damages.

Detroit, Mich. The board of education has taken the matter of the teachers' salary bonus into the courts for settlement. The action follows a veto of the bonus resolution by the acting mayor on the basis that it is illegal and that no funds have been provided for the purpose

A Citizens Committee headed by Edward W. Bok has submitted a report to the Philadelphia Board of Education which provides for an immediate flat increase of \$200 for every school employe. The schedule of increase provided by State Superintendent Finegan is to go into effect by January 1, 1920. The \$2,500,000 required is to be raised by an increase of eight mills in the school tax.

Niagara Falls, N. Y. The board has ordered that the superintendent suspend and dismiss all students who disobey the rule against high school fraternities.

Atchison, Kans. The board has raised the tuition fee from \$3 to \$5 for high school students, and from \$2 to \$3 for grade pupils.

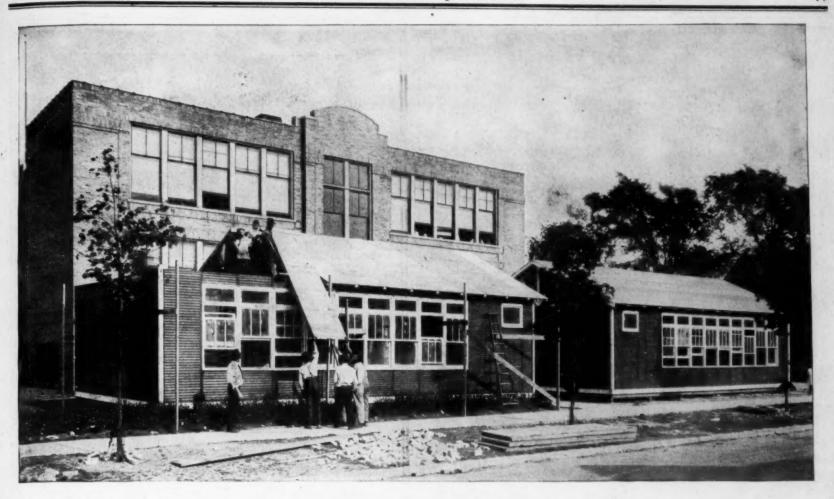
The board of education of New York, in its budget for 1921, has asked for eight new positions as follows: A counsel at \$7,500; five investigating examiners at from \$3,500 to \$4,500 a year; an assistant superintendent of school supplies at \$6,000; a chauffeur at \$2,470 to run the president's car, and \$10,000 for clerical help to the examiners, who will be separate from the board of examiners.

Appropriations of \$12,000 for free school texts and \$12,500 for general purposes, including salaries, were carried at the special election held at Vancouver, Wash.

At Scobey, Montana, the school board was ousted by the courts and a new board appointed by the county superintendent of schools. This is the culmination of a long fight, the main features of which were as follows: John Zuck was en-gaged as superintendent for a year, but was soon after dismissed on the charge of having become intoxicated at the flag day exercises held last June. A committee of citizens disagreed with the board and demanded the resignation of its members. Zuck was popular and efficient. The court believed that the board had exceeded its authority and ordered an ouster.

The board of education of Tarboro, N. C., has purchased a lot upon which it will erect a "teacherage." In the meantime a number of teachers will be boarded and lodged in a house rented by the school board for that purpose.

State Supt. L. N. Hines, of Indiana, has requested legal action against schoolbook companies who sell supplemental textbooks for higher prices than those listed by the state. Complaints have than those listed by the state. Complaints have been received which indicate that the book companies have advanced the prices of state-listed books and are refusing to deliver them to dealers who will not pay the higher prices.



No High Cost of Labor in Erecting These Schools

"Circle-A" Schools are factory-built complete. They are ready at conveniently located plants for prompt shipment. They are moderately priced. They are erected with amazing speed by unskilled labor.

"Circle-A" construction is interchangeable unit construction. After the units reach the site, all your men have to do is to bolt the units together. If the building is a small one it can be erected in a single day.

The units—consisting of floor, door, window, wall, ceiling, blackboard and roof sections—are uniformly three feet wide and fit perfectly. Each section is thoroughly tested for stability before it leaves the factory.

It is also worthy of note that the exterior walls are made of heavy siding outside and full plaster panels inside with dead air space and two thicknesses of paper insulation.

Built to endure, "Circle-A" Schools stubbornly resist the ravages of time and the elements year after year. And they are portable, too. They can be dismantled and re-erected any time, practically without damage.

We shall be glad to send detailed information regarding all the superiorities of "Circle-A" construction, including such advantages as maximum light, no small parts and no elaborate erection diagrams. We suggest that you write or wire today to the nearest office listed below.

THE ALEXANDER LUMBER COMPANY

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FORT WORTH, Texas



INTERCHANGEABLE UNIT BUILDINGS



A G&G Telescopic Hoist Makes Ash Removal Easy At Evander Childs High School!

THE Evander Childs High School, New York City, is one of the many modern schools throughout the country that are using a G&G Telescopic Hoist to quickly, quietly and economically remove their ashes and rubbish. It enables one or two men to remove as many as 100 cans of ashes a day—a task that requires as many as six men under ordinary methods.

Children and pedestrians are protected from open Hoistway by automatically operating G&G Spring Guard Gates—as shown in illustration. Sidewalk Doors open and lock—close and lock when Hoisting head is raised or lowered by turn of telescoping handle.

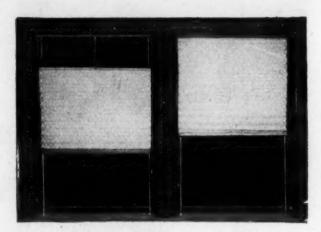
G&G Hoists are made in various standard models—electrical and manual—telescopic and non-telescopic. Can be easily installed in old or new buildings. Simple and sturdy in construction. Safe and dependable in operation. The G&G Hoist can be operated in extremely cold weather as no parts are susceptible to freezing.

Investigate the G&G Hoist NOW! When writing please tell us height of lift; quantity of ashes to be removed and how often; and whether cans are to be hoisted to sidewalk or high enough to dump directly into wagon alongside of hoistway.

GILLIS & GEOHEGAN

551 West Broadway, New York





Athey Perennial

ACCORDION PLEATED
WINDOW SHADES

Are as practical as they are outwardly beautiful.

To begin with, they give the plainest school building an air of luxurious comfort from the outside, as they look like costly Venetian blinds.

This has a wholesome influence on both teachers and children, as it makes them proud of their school.

Parents—and the whole town—will reflect this pride, and the school-board will win esteem and praise.

For the Health and Comfort of Teachers and Children

Shades are strung on piano wires at the sides. They open and close like a Japanese fan, or the folds of an accordion; can be raised from the bottom, lowered from the top, or both, and made to "follow the sun" winter or summer—hence the name "perennial."

This means that light and air are always under perfect control, and that windows may be opened in warm autumn or spring days, from top, bottom, or both, without "flapping" the shades.

We can arrange to equip your schools any time, without interruption to the classes.

Send for samples and quotations.

ATHEY COMPANY

(Also makers of the famous Athey cloth-lined metal weather strip)

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alwers MULTI-SERVICE PRODUCTS

THEIR USE MEAN CLEANER SCHOOLS

Palmer's Multi-Service Products meet the needs of the schools in maintaining clean and sanitary conditions and are economical because of their durability and length of service.



MULTI-SERVICE FLOOR BRUSHES

The improved reversible handle increases the life of the brush and permits convenient adjustment. Furnished with rigid or spring handle. Sizes 12" to 36".

SCOURING POWDERS SOAP POWDERS LIQUID SOAPS

MULTI-SERVICE SOAP DISPENSERS

A practical soap dispense small amount of soap, double acting valve prevents continuous flow of soap and eliminates waste. Furnished with aluminum or glass globe.

BRUSHES DUST PANS SANITARY DUSTERS
DISINFECTANTS—ALL KINDS



MULTI-SERVICE TOWEL FIXTURE

Made of grey from casting practically indestructible spaction prevents more than sheet to be taken out at a t Constructed to take any at ard 1½-inch paper core.

ERASERS INKS INK CRYSTALS

A simply constructed and durable toilet fixture. It is absolutely boy proof and the roll cannot be removed from fixture until exhausted. PAPER TOWEL FIXTURES

MULTI-SERVICE TOILET FIXTURE

TOILET PAPER FIXTURES SANITARY SCRUBBING SOAT

Order Palmer's Multi-Service Products from your Nearest Dealer.

If he cannot supply you write us direct and we will take care of your needs





DETROIT ARCHITECTURAL DEPART-

Upon the recommendation of the superintendent, a Department of Architectural Engineering has been established at Detroit, Mich., with Mr. A. L. Weeks as directing architect and an assistant superintendent as direct supervisor. The work of the new department is entirely administrative. It includes the divisions of property records, building research, landscape work and interior decoration. The functions of the divisions are:

Division of Property Records. plans of sites and small scales of all buildings now in use, and (b) to maintain a chronological history of every building to be constructed from the time the first research studies are started until the building is accepted and in use. These must be permanently and properly filed and safeguarded.

2. Building Research. (a) To collect the data necessary to the intelligent planning and use of new buildings and (b) to furnish complete information on the present use of existing buildings and to suggest ways and means of making these buildings more efficient.

3. Landscape Work. (a) To lay out and supervise the construction of lawns, walks, shrubbery and all ornamental planting on school build-ing sites, and (b) to lay out and supervise the grading, drainage and surfacing of all play-grounds and athletic fields.

To make a careful Interior Decoration.

study of the effects of color and to effect a close supervision in the finishing and beautifying of

BUILDING AND FINANCE.

A million dollar bond issue has been granted to the schools of Springfield, O., for building purposes. Plans are under way to construct large junior high schools in each of the north, south, east and west sides of the city. The contract for the building to be erected in the west end of the town has been granted to Paul R. Yeazell. The architect is Mr. O. D. Howard of Columbus, O. The building will cost approximately \$250,000.

Boston's school administration cost has leaped

from \$8,500,000 last year to \$12,500,000 this year. New York City has succeeded in securing only

45 per cent of the needed school repairs for the fall opening of the schools. Not one of the school buildings under construction was ready for occupancy. Several thousand children will be placed on half time attendance.

The smashing of school windows in nine months by mischievous boys has cost the Phila-

delphia Board of Education over \$15,000.

Detroit, Mich. Progress of building construction has been seriously retarded this year because of difficulties with labor and material. Seventeen additions and four new buildings, with a total capacity of 9,370 pupils, are under construction, exclusive of the 1920-21 building program. Plans are now being perfected whereby temporary relief will be afforded by the use of portable buildings to be used until the projected structures are ready.

Seymour, Ind., has fixed the tax levy for school

purposes at \$1 on the \$100 of taxable property. This is an increase of 42 cents.

The Minneapolis, Minn., board of education has under consideration a thirty million dollar school

In two rural school districts in San Miquel County, New Mexico, the people laid aside all other work and built schoolhouses. In three weeks the two buildings, one costing \$6,650, and

the other \$9,100, were completed.
Charlestown, S. C., is facing a \$50,000 school deficit. A special loan is contemplated.

The increased cost of textbooks will mean that

the increased cost of textbooks will mean that \$28,000 more for this purpose must be paid by the schools of Cleveland, O.

The New Albany, Ind., school board must find \$40,000 more to meet its budget for the ensuing school year. An increase in the tax rate of 36 cents is provided for school year. An increase in the tax rate of a cents is provided for.

An investigation of the relations existing beards and financial officers of the

tween school boards and financial officers of the cities of the state of New York is to be made by a joint committee of the two chambers of the state legislature. The committee is charged with the duty of considering questions of state policy in education, the amount of state contribution to schools, and minor changes in the state schedule of teachers' salaries. Information will also be obtained from the state education department regarding salary schedules, expense estimates, and possibilities of further taxation for schools

and possibilities of further taxation for schools in cities of the first, second and third classes.

A state wide tax levy of six mills for school purposes to be voted at the Oklahoma November election will be opposed by many cities and towns of that state.

Conway, Ark., sold \$125,000 worth of 6 per cent school bonds or a 95 cent basis.

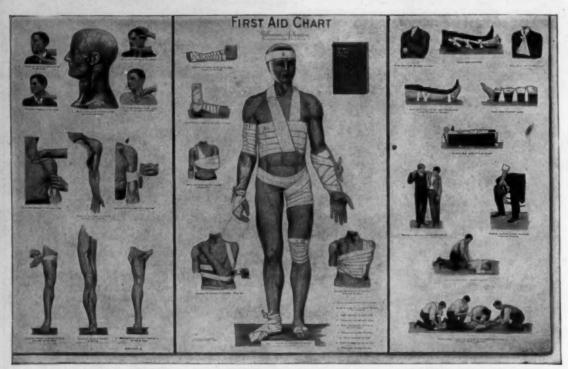
school bonds on a 95 cent basis.

It has been announced by the board of assessors of Boston, Mass., that the tax rate for 1920 is \$24.10 on the thousand, an increase of only 50 cents, the rate for 1919 having been \$23.60. 50 cents, the rate for 1919 having been \$23.60. The tax rate for the schools increased \$2.12, from \$5.02 last year to \$7.14 this year. The largest increase in expenditures by the city of Boston was that for schools. The appropriations in 1919 for school purposes totalled \$8,451,234.44. This year the total is \$12,526,583.31, an increase of \$4,075,348.87, or 48½ per cent.

It is estimated that the rural school fund of Columbia, Tenn., will be increased next year from \$300,000 to nearly \$900,000, figuring the raise in the assessed valuation of the property of the state at 200 per cent which will be about the average for Tennessee. The special session of the legislature refused to apply the sliding scale of taxation to the five cent school levy on all property in the state which is used for the benefit of the smaller and poorer counties. It is paid

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The Chart is 27 x 44 inches, lithographed in ten colors on heavy board. Folds for car-The back of the Chart contains full First Aid instruction in black and white.

FREE

to any school that is now giving attention to instruction in first aid and which is equipped with first aid material.

This handsome chart will be given with our compliments to any Superintendent or Principal who writes us about the work that is being done in this important subject.

The Chart as shown in the illustration is an education in itself and will hold student-interest when they tire of pondering over books.

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A complete working guide for first aid instruction

JOHNSON & JOHNSON NEW BRUNSWICK, N. J.

on the basis of taxation and distributed on the

basis of population. Lynn, Mass. The Lynn, Mass. The school board has named a school building the Sewell-Anderson, in memory of two boys from the district who made the supreme sacrifice in the world war. The build-

supreme sacrince in the world war. The building was completed at a cost of \$50,000.

Reading, Pa. The high cost of building material has made it necessary for the board to abandon its plans for erecting new buildings. The board in the face of the new situation, has adjusted its plans to meet existing needs.

Minneapolis, Minn. An expansion of the public school system thru the expenditure of \$25,000,000 during the next ten years has been suggested by Supt. B. B. Jackson. The recommendation is the result of a survey of the schools' anticipated needs for the next decade which provides for the erection of twenty grade schools, the remodeling of fifteen structures, the erection of eight high schools, the purchase of 45 additions to sites, and the purchase of twenty building sites. Renville, Minn. The board of education has

begun the construction of four bungalow schools to take care of the students until the new high school is completed.

The school board of the Windsor school district of Weld County, Texas, will erect a "teacherage". The building is to resemble a large home but arranged like an apartment house. The cost will be \$35,000.

The Manitowoc, Wis., school authorities were halted in a million dollar high school project thru the discovery that further power must be secured at the hands of the next legislature. The law creating the present enlarged school district makes no provision for the issuance of school bonds.

Denver voted a \$2,000,000 bond issue but succeeded only in selling \$350,000 worth. The rate of interest was fixed at five per cent. The rate has not been raised to six per cent.

Washington, D. C., will demand \$30,000,000 for school purposes. It is expected that Congress will grant about one-tenth of that amount. A new high school at an estimated cost of \$1,500,000

Plans for an addition to the Tulsa, Okla., high

school have been approved by the board of educa-tion, and a bond issue of \$850,000 to finance the same, has been voted on. The addition will be the same architectural style as the present building and will be built as a unit of it. When com-pleted, the new structure will cover practically the entire block

Philadelphia, Pa. The board of education will receive \$2,670,000 more during the current year than it did last year. The additional amount wil be available largely for increasing teachers' salaries. The increase comes mainly thru the increase in the school tax rate and the increase in the valuation of the assessments of taxable property

Mr. K. F. Dreher, deputy commissioner of edu cation, St. Paul, Minn., has resigned to enter business. Mr. Dreher has been in charge of all purchasing for the schools and has had supervision over certain details of the management of school buildings.

Mr. A. E. Eggert, city purchasing agent, has been mentioned as successor to Mr. Dreher.

been mentioned as successor to Mr. Dreher.

The United Township high school board of education, East Moline, Ill., has raised janitors' salaries \$300 per year, and \$100 extra for the firing months for extra help. The board will provide equipment for a 100 per cent increase in enrollment, such as seats, lockers, manual training benches, woodworking machinery, and an extra piano. The board will also prepare for a continuation school next year.

NEWS OF SCHOOL OFFICIALS.

NEWS OF SCHOOL OFFICIALS. C. W. Eurton has been appointed insp of buildings and grounds for the Indianapolis board of education.

Miss Cora Stewart has been appointed secremiss Cora Stewart has been appointed secretary to the board of education and stenographer to the superintendent at Morris, Ill.

Mr. J. Elden Bowman, on account of ill health, has resigned from the Springfield, O., board of education. Mr. Walter E. Lloyd has been elected

to fill the place made vacant.

Mr. Samuel Stern has been appointed a member of the New York City small board of education by Mayor Hylan. The term of appointment runs to 1924.

Mr. A. P. Ortquist has been elected a member

of the board of education at Minneapolis, Minn., to succeed Mr. David F. Swenson who resigned.
Mr. Howard Cook has been reelected treasurer, and Mr. Sam Haley, secretary, of the school board of Jefferson City, Mo.
Mr. W. Howard Pillsbury, who formerly held the office of Scenetary to Superintendent F. C.

the office of Secretary to Superintendent E. C. Hartwell of Buffalo, has been made deputy superintendent of schools for the Buffalo school sys-

mr. C. J. Naegle of Corry, Pa., has accepted the principalship of the training school at the East Stroudsburg Normal School. Mr. Naegle is succeeded at Corry by Mr. A. Earle Hemstreet, formerly of Wayland, N. Y.

Prof. E. L. West of Tuscumbia, Ala., has accepted the position of superintendent of the Paint Lick, Ky., consolidated schools.

Sanford B. Murphy, for several years principal of the Washington Township, Ind., schools, including the New Washington high school, has removed to Chillicothe, Ill., where he was recently elected superintendent of schools. His salary is said to be twice what it was in New Washington. Wichita, Kans. Mr. Walter Kemp has been elected president, and Mr. J. L. Leland secretary of the board of education.

of the board of education.

of the board of education.

The New Albany, Ind., board of school trustees has organized as follows for the coming year: John Hahn, president; Dr. R. S. Rutherford, secretary, and Thomas E. Crawford, treasurer.

Mr. Charles E. Decker has been elected superintendent of schools at Wethersfield, Ill.

Mr. R. B. Smith has been elected superintendent of schools at Connellsville Pa.

ent of schools at Connellsville, Pa.

Supt. Frank J. Prout has been re-elected at

Chillicothe, O., for a five-year term and a salary

Dr. Frank E. Baker has been appointed principial of the state normal school, at East Stroudsburg, Pa.

Mr. J. Harvey Witherspoon of Gaffney, S. C. been elected superintendent of schools at Clinton.

Supt. John W. Todd of Salem, Ore., has signed to enter business at Vancouver, Wash.

Mr. J. A. Baxley has been elected superintendent of schools at Talladega, Ala.



Why the School Lunch Room?

The objective of the school is to fit the pupil for the business of living. No child that is undernourished is properly fitted to take his place in modern society. Cold lunches at noontime do not furnish the proper nutrition for the afternoon session. Then, too, all children require food for growing. The fact that the majority of school children are improperly fed is borne out by the marked improvement in the scholarship in schools that have installed lunch rooms.

The school lunch room does not necessarily entail a large investment, and can be made to pay all expenses and still furnish hot dishes to students at a remarkably low price. Often a five cent bowl of soup is an adequate supplement to the lunch carried by the pupil. In many schools the domestic science classes prepare part of dishes for the lunch room. Here it is possible to make a saving of the cost of the materials for the domestic science rooms. Courses in this manner are rendered much more practical as the students are not forced to work with abnormally small qualities because of the high cost of materials.

We invite consultation in the planning of school lunch rooms and domestic science departments. This will incur no obligation on your part. Our service includes the designing, complete outfitting and installation of these establishments. Many of the finest school cafeterias in the country are the products of our service organization.

OTHER SCHOOL LUNCH ROOMS WE

| Coto Notice Will Colod Chine W. |
|--|
| Carter Harrison High School Chicago, Ill. |
| Mississippi Woman's College . Hattiesburg, Miss. |
| Moline High School Moline, Ill. |
| Harrisburg High School Harrisburg, Pa. |
| Nicholas Senn High School Chicago, Ill. |
| Valparaise University Valparaise, Ind- |
| Nebraska State Normal School Peru, Neb. |
| Sam Houston Normal Institute Huntsville, Texas |
| South Dakota State College . Brookings, S. D. |
| State Teachers' College Greeley, Colo. |
| Millsap's College Jackson, Miss. |
| Academy High School Erie, Pa. |
| Sapulpa High School Sapulpa, Okla. |
| Iowa State College Ames, Iowa |
| Muskegon Commercial College . Muskegon, Mich. |
| Lake View High School Chicago, Ill. |

We have prepared several books and bulletins which will interest you. These will be sent to you at your request. To avoid error kindly mention the books by number.

Y10—Equipment for Cafeterias, Lunch Rooms, Restaurants and Dining Rooms.

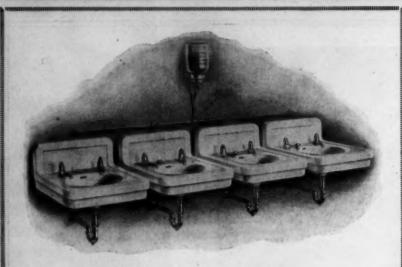
Y151—Feeding the School Child.

Y152—Practical Domestic Science in City and Country Schools.

Y21—General Catalog of Furnishing, Equipment and Supplies.

ALBERT PICK COMPANY

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Children's Diseases Often Start in the Wash Room

Drinking fountains have eliminated the unsanitary tincup, ventilation has purified school rooms, but the last source of contagion lingers—the dirty bar of soap that all the fingers touch. Make your wash room sanitary with a

Watrous Gravity Liquid Soap System

which gives every child clean, pure soap. It's cheaper to operate, too.

Without disturbing the present plumbing, it can be quickly installed. One central, easy-to-fill container serves any number of bowls. No moving parts to get out of order. Less work to keep it filled and in running order.

Schools everywhere are installing Watrous Systems. Let us send you our illustrated catalog.

The Imperial Brass Mfg. Co.

1215 W. Harrison St., Chicago, Ill.

Watrous sanitary plumbing includes Watrous Duojet Closets, Urinals, Self-Closing Cocks and Drinking Fountains.



R. U.V. Sterilizers Guard Swimming Pool of Saint Paul Athletic Club

THE Saint Paul Athletic Club swimming pool (shown above) embodies every late idea in swimming pool construction and maintenance. It is equipped with a circulating system that turns the pool content over and over again—the water being passed through R.U.V. (Ultra Violet Ray) Sterilizers for purification before its re-entry into the pool.

The bathers are thus economically, perfectly and continuously guarded against contraction of disease through impure pool water.

For information address Dept. L.



SHOWERS

WITH THE

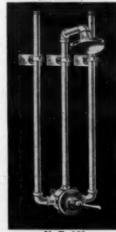
INCOMPARABLE NIEDECKEN MIXER

Patented

SAFETY EFFICIENCY ECONOMY

Simplicity and ease of accessibility for repairs when necessary—which are seldom.

The Only Tool
Required
Is
A SCREWDRIVER



ANTI-SCALD-ING PERFECT CON-TROL EVERLASTING

The valve seats are renewable and easily replaced.

Showers furnished for all requirements. Concealed or exposed type mixer.

Shower heads are cast brass.

Economy Shower, made of \(\frac{1}{2}\)" galvanized pipe, rough brass N. P. Mixer, cast brass shower head. Price, \$32.00

Piping not included.

Suggest finishing, with white enamel paint or aluminum bronze after installing.



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GIRLS

Write for Bulletin S. B. 15 X.

HOFFMANN & BILLINGS MFG. CO.,
100 SECOND STREET. MILWAUKEE, WIS.



The Sanitary Conditions Surrounding Children in Schools are of Vital Importance!

CORO-NOLEUM. To insure "healthful cleanliness" for the children entrusted to your care you should have the floors, walls, toilets, desks, etc., cleaned daily with Coro-Noleum, the powerful cleansing disinfectant. It possesses the combined qualities of a cleanser of unusual merit, a thorough and effective disinfectant, and a reliable deodorant. A tablespoonful to a gallon of water is sufficient to make a solution more efficient and economical for cleansing than soap or soap powders.

LIQUID SOAPS

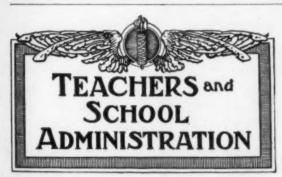
PAPER TOWELS

WEST DISINFECTING COMPANY

Branches in Principal Cities

Dept. C

Main Office: 411 Fifth Avenue, New York



The board of estimates of Greater New York has authorized the sum of \$3,668,692 for increased teachers' salaries for the ensuing school year.

The board of education at North Chicago, Ill.,

The board of education at North Chicago, Ill., has increased the salaries of teachers of the North and Commonwealth Schools, raising the minimum which was formerly \$60 per month to \$100.

The Lancaster, Pa., branch of the American Federation of Teachers has refused to disband in compliance with the order of State Superintendent Finegan.

The teachers of Oakland, Calif., have petitioned the Mayor and Common Council of that city to grant the appropriations necessary to enable the school board to pay increased salaries. The Sangamon County, Ill., school board re-

The Sangamon County, Ill., school board reports that its rural schools are fully equipped with teachers.

Boston Elementary Teachers' Club has petitioned the school board to abolish the 10-payment system and adopt the 12-payment basis instead.

The salary of Superintendent A. S. Martin, Norristown, Pennsylvania, has been raised from \$3,500 to \$4,000.

Teachers' salaries in Illinois have increased 45 per cent since 1913, and school janitors' salaries have increased 63 per cent, according to statistics compiled by the state superintendent of public instruction. The average salary of a man teacher is now \$1,163 and of a woman teacher \$801.

The special commission on school teachers' salaries which was appointed by Gov. Coolidge of Massachusetts has reported that the increases thus far made have not kept pace with the cost of living, and recommended higher minimum salaries, to attract capable young men and women into the teaching profession, to retain efficient teachers now in the service, and to enable all teachers to provide from salary earnings, the necessaries of life, savings and insurance against disability and old age.

The committee on salaries of Chelsea, Mass., has recommended to the school board that the salaries of teachers be increased \$100 each for the year.

Court action has been decided on by the board of education of New York City as a means of compelling the city comptroller to pay \$204,000 which is due teachers as absence refunds since 1918. President Prall announced that the board would bring suit in order to save individual claimants the expense and trouble of litigation.

The sum of \$30,000 will be available for increases in salaries of teachers and principals of Norfolk, Va., for the new school year. Under the new schools from the minimum of \$1,000 in elementary schools to \$4,000, the maximum possible for the principal of a high school. In the colored schools the salaries will range from the minimum of \$650 in the elementary schools to \$1,800, the maximum possible for the principal of a high school

According to the report of city Superintendent H. W. Dodd of Allentown, Pa., the salaries of the lower grade teachers have been doubled during the past five years, and those of the higher grades have been increased fifty per cent. The minimum salary is now \$95 as against \$45 in pre-war times.

The board of education of Buffalo, N. Y., has voted an increase in salaries, aggregating nearly \$1,000,000. This will be a flat increase of about \$400 a year each to about 2,300 teachers, supervisors and principals. An additional \$50 appropriation for each teacher was withheld by the board, altho the fund with which to pay it will be available.

A flat increase of \$450 was given every momber of the teaching staff in Troy, N. Y.

Dayton, O. The board has passed a resolution decreasing the number of years required for a grade teacher to reach the maximum salary of \$140 a month, from twelve to seven years. The change places grade teachers on a par with those in the high schools. An additional one-mill levy has been requested in order to limit the amount of money to be borrowed for teachers' salaries.

Detroit, Mich. The administrative department of the city schools has announced the incorporation of several new features in the handling of substitutes. Assignment and supervision of substitutes is to be handled thru Teachers College. It is required that requests for substitutes be made as early as possible, and preferably in the afternoon of the day before.

To decrease the loss of time involved in sending substitutes from the College to the distant schools, groups will be kept at the various centers. Each building in charge of a supervisory principal will be a substitute center, and each school needing a substitute will telephone the particular center.

Substitutes are divided into three classes: (1) salaried, (2) regular, and (3) emergency.

 A salaried substitute is an unassigned cadet teacher, or an unassigned contract teacher.

2. A regular substitute is one qualified under the rules of the board. She holds no contract but receives a regular monthly salary, \$140 for elementary schools, and \$160 for high schools. She has the same responsibility for reporting on time each and every day as an appointed teacher, and is entitled to the same number of days of personal illness.

3. An emergency substitute is one qualified under the rules of the board of education. She receives \$7 for each day of service in the elementary schools and \$8 for each day in the high schools.

Salaried substitutes contribute to the teachers' retirement fund, but no deduction is made from the salary of regular or emergency substitutes for this purpose.

YOU KNOW WOLFF PLUMBING-IS IT WORTH WHILE TO CONSIDER ANY OTHER?

WOLFF MANUFACTURING CO.

Mfrs. of Plumbing Goods Exclusively

General Offices Show Rooms

255 N. Hoyne Ave. 111 N. Dearborn St.

CHICAGO

All salaried substitutes, and regular substitutes who are not permanently assigned, are not placed on the payroll of any building in which they substitute, but are taken care of on a special substitute payroll prepared by the depart-

Emergency substitutes and regular substitutes, if assigned to a regular room and grade, are placed on the payroll of the buildings in which they substitute, the same as a regularly ap-

pointed teacher.

pointed teacher.

From each group of substitutes assigned to a center, the department must appoint, subject to the approval of the supervising principal, a head substitute to take charge of the work at that center. Her duties shall be:

1. To report to the substitute center each morning at 8 o'clock, notifying both the principal and the substitute department upon article.

To receive calls and assign substitutes

under the direction of the principal.

3. To notify the substitute department when no more substitutes are available in that center, or when a call comes she is not able to fill.

4. To examine substitute cards and see that they are properly filled out.
5. To keep such records and make such reports as may be required.

State Superintendent Vernon M. Riegel of Ohio says that the rural school conditions must be improved if the proper quota and quality of teachers is ever to be secured.

Married women will hereafter be appointed and promoted as teachers in the public schools of New York City on the same basis as unmar-ried women, according to new by-laws adopted by the board of education. A former rule provided that no married woman should be appointed to any teaching or supervisory position unless her husband was incapacitated from physical or men-

tal disease to earn a livelihood.

The board of education at Hurley, N. Mex., has erected and equipped a twenty-room modern dormitory for the teachers. The building has a dining room and kitchen providing accommoda-tions for all lady teachers at a minimum rate. The superintendent of schools has also been furnished with a five-room house.

Breckenridge, Tex. The board has awarded a contract for the erection of a dormitory for teachers. The building meets a demand for housing accommodations which had become serious.

Detroit, Mich. Detroit teachers, handicapped

by the lack of housing accommodations, have decided to conduct a hotel of their own. About one thousand teachers will be accommodated.

Minneapolis, Minn. A scarcity of teachers and an unusual increase in salaries, has caused many high school girls to register for the training course offered at the Girls' Vocational High A one-year course is open to girls over 16 years of age who have had at least three years of high school training.

Instruction is given in academic subjects, child study, pedagogy, school management, music, drawing, manual training, agriculture, physical training, cooking and sewing. Observation and practice teaching is done in the public schools, and each member of the class before finishing must have had two weeks of teaching in rural schools.

Baltimore, Md. The schools opened the fall term with almost a full quota of teachers due to the elimination of the rule against married women and to other causes.

Superintendent Gannon of Pittsfield, Mass., has announced that young women teachers who marry during their term of teaching are expected to resign at once, altho married women, now on the teaching force and doing satisfactory work, will be retained. Young women who marry during their term of service as a teacher, but who wish to continue teaching, will be placed on the regular substitute list until an unmarried teacher who is qualified, fits into the place. Superintendent Convengence of its two convengence to the very convengence of the very co dent Gannon said it was only just to the young unmarried women who have taken preparatory teachers' courses at normal schools and colleges that they should have the preference.

Bridgeport, Conn. To give the city the full benefit of the time of the teachers, and to place a partial control on outside work, the board has

proposed a rule for early adoption. The rule

"The high school day being shortened by neces of two complete school sessions in a day, the principal may call upon any teacher to return in the sessions in which she is not regularly engaged for at least one period for conference work with pupils or teachers. All teachers are prohibited from entering upon any regular employment which will interfere with the application of this regulation, or which will in any way make demands upon the time or interest of the teacher which belong to the school

which belong to the school.

Teachers engaged in private tutoring during the school term shall do so upon recommendation of the principal and approval of the superintendent.

Teachers are not satisfied that their interests will be fully protected under the operation of this rule and at a meeting authorized Miss Ger-trude Fitzpatrick, president of the association, to name a committee to investigate its provisions. The high school teachers will meet later to con-

sider the situation as it may affect them.

The teachers of New York have been formally invited to join the American Federation of Labor. Vermillion County, Ill., reports that it is amply supplied with teachers.

Mandamus proceedings were brought by the teachers' federation against the Minneapolis board of education on the charge that the board has failed to pay out in salary increases the fund raised by a 3½ mill tax levy sanctioned by the state legislature.

School districts of York and Plattsmouth, Nebr., are unable to pay the balance due on new schoolhouses. Suit has been brought against

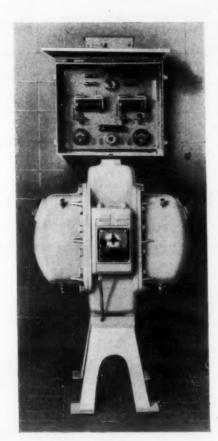
Muscatine, Iowa, defeated a \$425,000 bond issue for new buildings and repairs.

Menasha, Wis., has completed plans for a teacherage to solve the housing problem of its teachers.

Evanston, Ill., teachers will be taken care of in two large houses which the board has provided. The lower floors will be used as reception parlors and classrooms.

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EVEN though your water supply may be pure now, you can't tell when it may become polluted and endanger the health of many of your pupils before its condition is discovered. To sterilize your drinking water is to insure your pupils against contamination from that source.

The Ultra Violet Ray system of water sterilization is recognized not only by science, but by practical users, as the only absolutely reliable and economical means of water purification. Furthermore, taste, color, and temperature, as well as chemical and mineral characteristics, remain absolutely unchanged.

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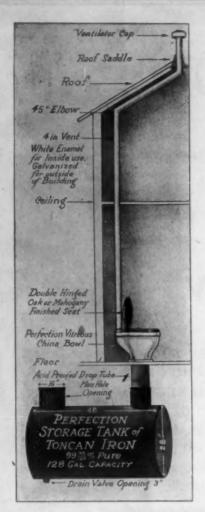
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LOOK BACKWARD to the DISTRICT SCHOOL of your own CHILDHOOD

Teacher with ruler in hand; knife-bitten desks; blackboards made by black paint on wood. **Inadequate** describes it truly, even if the memories do tug at your heartstrings.

Modern schools in rural districts are better taught and better furnished. But in too many cases, they are **not** better equipped from a Sanitation standpoint.

The privy is one of the abuses that still persists. The privy is an institution of the Dark Ages. It belongs in the discard with physical chastisement and the rudimentary methods of the "Three R" teacher.

To insure proper sanitation, if sewers are available, by all means install plumbing, but if not, then remember that

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- Are approved for school use by State and Government authorities.
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- 3. Permit indoor installation without plumbing.
- 4. Prevent colds caused by running out of doors.
- 5. Help to prevent typhoid, hook worm, etc., etc.
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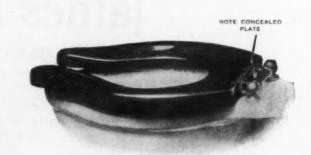
Recently a well-known engineer and sanitary expert inspected our seat department at factory. On leaving stated, "I had no idea that Whale-Bone-Ite toilet seats were made with such expensive machinery, hydraulic presses, conveyors, etc., or of the attention to details I have just seen".

Very few engineers have really thought of seats being made under pressure of 1200 pounds per square inch, that means tons pressure per seat, which emphasizes the equipment necessary.

That man has a new view now of the quality and durability of Whale-Bone-Ite toilet seats, and so will those who will carefully inspect the sectional sample and cuts showing construction, which we will gladly send on request.



Cut Shows No. 23-9 Seat



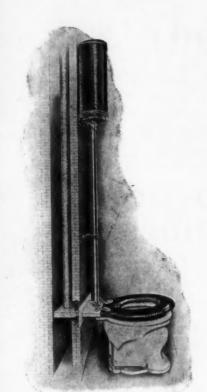
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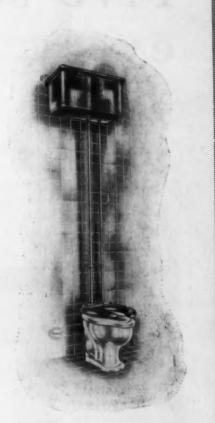


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They are scientifically designed to give satisfactory service under the most unusual and trying conditions.

Remember, we have been manufacturing plumbing fixtures for schools for over forty years. We know what is required and are prepared to supply you with the very best.

> Our many years of service to the School Boards of America is a record of which we are proud.



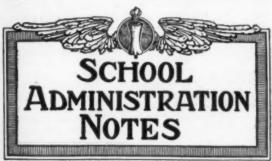


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WHY I LIKE TEACHING—PRIZE ESSAY.

Supt. John Dixon, Columbus, Wis.

I like teaching because I like boys and girls, because I delight in having them about me, in talking with them, working with them, playing with them, and in possessing their confidence

I like teaching because the teacher works in an atmosphere of idealism, dealing with mind and heart, with ideas and ideals.

I like teaching because of the large freedom it gives. There is abundance of room for original planning and initiative in the conduct of the work itself, and an unusual time margin of evenings, week-ends, and vacations in which to extend one's interests; personal and professional.

I like teaching because the relation of teacher to learner in whatever capacity is one of the most interesting and delightful in the world.

Teaching is attractive because it imposes a minimum of drudgery. Its day is not too long, and is so broken by intermissions, and so varied in its schedule of duties as to exclude undue weariness or monotony. The program of each school day is a new and interesting adventure.

Teaching invites to constant growth and im-

provement. The teacher is in daily contact with books, magazines, libraries, and all of the most vital forces of thought and leadership, social and educational. It is work that stimulates ambition, and enhances personal worth. There is no greater developer of character to be found.

Also, teaching includes a wide range of positions and interests, extending from kindergarten to university, covering every section where schools are maintained, and embracing every variety of effort whether academic, artistic, industrial, commercial, agricultural or professional.

There is no work in which men and women engage which more directly and fundamentally serves society and the state. Teaching is the biggest and best profession in the nation because it creates and moulds the nation's citizenship. It is the very foundation and mainstay of the national life.

And now at last the teacher's work is coming into its own. From now on, the teacher will be adequately paid, and accorded the place which is rightfully his in the public regard.

The true teacher is, and may well be, proud of the title, for his work is akin to that of the Master Builder, the creation of a temple not made with hands.

SCHOOL ADMINISTRATION NOTES.

State Superintendent Wood of California argues for a twelve months' school year. "Summer vacations are an aid to criminality," he

A number of Oak Park, Ill., clergymen have in-augurated a movement whereby the school children are to be given religious instruction for 45 minutes, two days a week. Members of the school board hold that such a proceeding is unlawful inasmuch as full time attendance at school is prescribed.

A special commission will report to the Massa

chusetts legislature on changes in the school laws of the state designed to make for greater efficiency

At Canton, Ohio, the school board announces its evening schools in full-page advertisements.

Fairfield, Ill. The public schools are being operated under the unit plan of organization.
The community high school has reported an enrollment double that of the last two years, showing that farmers of the community are not in opposition to high schools.

Of 6,445 schools in France destroyed by the

war, 5,345 are reported as reestablished in some form. In most instances, the buildings are cheap and temporary, but the important fact is that the children are in school.

the children are in school.

The enrollment of the New York City schools has exceeded the one million mark, as follows: Public schools, elementary grades, 778,000; high schools, 75,000; continuation classes, 18,000; parochial schools, 97,000; other denominational and private schools, 90,000.

Detroit, Mich. Altho there has been the anticipated increase of 6,000 pupils in the schools, the school authorities announce that the number on half time will not be materially increased.

on half time will not be materially increased. Completed additions, temporary structures and the erection of new buildings will provide considerable relief in the housing situation.

Minneapolis, Minn. The completion of one Minneapons, Minn. The completion of one structure and erection of an addition to another building are expected to relieve the housing conditions. The number of half-day pupils will be reduced by 2,750 according to estimates of the

board of education.

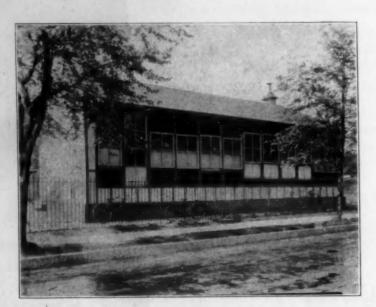
Atlanta, Ga. The double-session plan has been inaugurated in the schools to overcome a serious lack of accommodations. Several hundred more children have enrolled this year, with no appreciable increase in seating arrangements.

The city council of Haverhill, Mass., has been asked to approve the recommendations of a committee providing for the placing of fire alarm boxes at certain school buildings and for the transfer of others to new locations.

Williamsport, Ind. The school authorities have utilized several of the local church build-

Five school fires every day in the year!

Illustration below shows one of the Asbesto-Crete School Houses.



The Asbesto-Crete school house is much less expensive than an ordinary brick or stone structure. It requires no repairs and is absolutely fire-proof.

Asbesto-Crete Buildings

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We can supply the Asbesto-Crete school houses in one and two room buildings and will submit prices on request.

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1927 Market Street, Philadelphia

ings as classrooms until the temporary structures are completed. The children, with their teachers, reported at the designated places.

Worcester, Mass. The school authorities have been forced to place the pupils in sixteen schools on a part-time basis because of an unforeseen increase in enrollment. Under the new arrangement, more than two thousand children will residue to the school of the ceive only four hours of instruction daily.

Lowell, Mass. The six-three-three plan has been adopted in the schools with the opening of the new school term. The transition from the eight-grade plan to the six-year plan is to be gradual and will probably extend over a number of years.

Rome, Ga. The school authorities have in-augurated the two-session plan. Smaller pupils attend classes from one to three o'clock and the larger ones from 8:30 to 12:30 o'clock.

Knoxville, Tenn. With the opening of the fall term, the high school girls appeared in uniform dress attire. The costume consists of wool blue serge middy suit, with brown or black low-heeled shoes and hose to match. For spring and fall wear, it is provided that white or khaki middy blouses may be worn with the serge skirt. The costumes were selected by a committee of the local parent-teachers' association from specifications adopted by the board.

Decatur, Ill. Supt. J. O. Engelman, in his fall announcement to the teaching staff, outlined four important activities which it is desired to accomplish during the present year. These include a reorganization of the school system to include a junior high school; a revision of the course of study; the preparation and publication of a report of the schools for the last five years, and lastly, the promotion of legislative enactments for the betterment of the schools.

State Supt Vernon Riegel of Ohio is in favor

State Supt. Vernon Riegel of Ohio is in favor of twelve months' schooling, which does not mean that there will be twelve months of classroom work. There will be nine or ten months of the formal indoor, theoretical work and two or three months of outdoor practical work. The first step was taken by a committee of schoolmen in deciding to try out a plan of a half-day of

school and a half-day of work for six weeks this fall and six weeks next spring in centralized schools of several counties. If it proves successful the readjustment will be made in rural

Schools in other counties.

Between 6,800 and 7,000 teachers in Illinois have taken advantage of the provisions of the state teachers' pension and retirement fund act by becoming voluntary contributors before August 31st. It is estimated that at least 7,000 teachers failed to register, thus placing themselves beyond the provisions of the act. Besides the 7,000 who contributed, there are 17,000 who have started teaching since July 1, 1915, who are conveiled by law to contribute. Additions to compelled by law to contribute. Additions to the fund this year consist of \$328,852.89 con-tributed by the state, and about half that amount

by the teachers. The fund was founded in 1915 with an appropriation of \$6,000,000.

Superintendent Frank O. Draper of the Pawtucket, R. I., schools has made the statement that there never was a rule adopted in that state by which a woman teacher is prevented from continuing her duties as a teacher after more continuing her duties as a teacher after mar-riage. An erroneous impression has prevailed relative to the employment of married women teachers which has been removed by his statement. He says married women teachers are equally as desirable as their married colleagues, and that there are at present twenty married women in the employ of the school department as substitutes.

law permitting township trustees to build suitable homes for school teachers, is urged in a resolution prepared by the resolutions commit-tee of the Indiana State Teachers' Association, in session at the Hotel Severin recently. Preparation of another resolution, providing for the consecration of the public schools to the study of the United States Constitution, has been authorized by the committee. The resolutions authorized by the committee. The resolutions decided on by the committee will be presented at the meeting of the State Teachers' Association next month.

Among the resolutions adopted was one to provide for the continuance of the Indiana teachers' war memorial commission, established last year to investigate the cost of erecting a suitable monument to the Indiana teachers who served in the war. The committee went on record as approv-ing the consolidation of rural schools and asking that one-room schoolhouses be abandoned. Other resolutions favored equal educational opportun-ity for all children in the state, the removal of the office of state superintendent of public in-struction from partisan influences, increased sup-

port for higher education, and state supervision of public and private schools.

At the suggestion of L. N. Hines, state superintendent of public instruction, the committee voted to indorse the state-wide campaign, November 7 to 16, to increase Indiana's educational efficiency. efficiency.

The members of the committee at the meeting were: H. L. Smith, Bloomington; H. B. Roberts, Newcastle; Miss Katherine Beeson, Lafayette;

Newcastle; Miss Katherine Beeson, Lafayette; M. J. Lasher, Gas City; Horace Ellis, Chicago, and Mr. Hines.

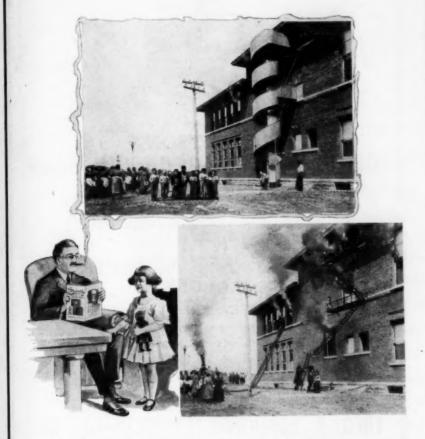
Mr. W. H. Pabodie, of Walnut Hills, Cincinnati, O., who was recently given a leave of absence preliminary to his retirement, has been a teacher since 1856. Mr. Pabodie who is 87 years of age, has completed a teaching service of 61 years, fifty of which were spent as an instructor in languages in the Cincinnati high schools.

Among Mr. Pabodie's former students are 30

Among Mr. Pabodie's former students are 30 teachers, ten college professors, 28 doctors, twelve ministers, fifty lawyers, five judges, and one President of the United States.

More than fifty schools in southern Ohio face a possible closing due to the fact that the teacha possible closing due to the fact that the teach-ers in them have not secured the minimum of training necessary under the provisions of the state rural school code. Most of the schools are those of the one-room type in districts in which the minimum compensation under the law is

Under a former state superintendent, the policy was adopted of insisting upon enforcement of the law, but final steps were never taken to make the enforcement effective. Teachers were make the enforcement enective. Teachers were given temporary certificates year after year and were not compelled to live up to the law. The present superintendent has announced that the law will be enforced and that the schools will be allowed to find legally qualified teachers.



Mr. Jones, Chairman of the School Board, indulges in a little thinking and visualizing of what would happen if the city school, equipped with old fashioned, ladder-type fire escapes, should take fire—and of the greater opportunity for escape afforded by Standard Spiral Fire Escapes.

FIRE moves with the rapidity of lightning, almost instantly spreading its deadly presence throughout the school building, and leaving destruction and death in its path. Time is reckoned in seconds at such critical moments, and life hangs by a very slender thread.

Picture in your mind a typical school house equipped with the old type fire escape. When fire menaces, what chance have the panic-stricken children to escape?

A STANDARD GRAVITY SPIRAL FIRE ESCAPE under actual test, lowered two hundred children in a minute's time. The smallest and weakest child has the same opportunity of escaping from the burning building as its strong and robust playmate. They simply slide to safety.

Send us the floor heights of your school building and we will send you promptly an estimate of cost of a Standard Spiral Fire Escape. Act promptly—TODAY.

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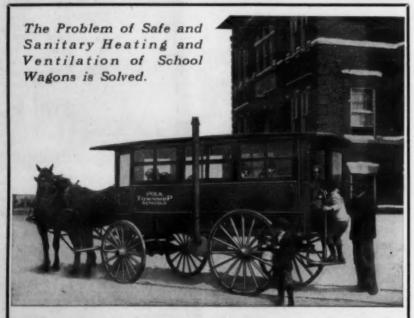
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Disease is now sweeping over the country endangering the lives of young and old alike. The epidemic of Spanish Influenza finds an inviting field for its deadly work in crowds, in damp, cold atmosphere, in poor ventilation.

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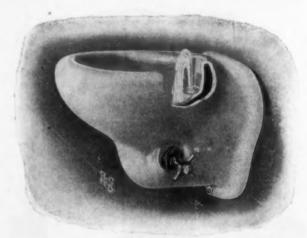
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Coal is higher than ever before and every year it costs a little more.

No system of heating and ventilating is complete and adequate without automatic temperature regulation. The Johnson System of Heat Control is dependable. The Johnson Company offers the best grade of apparatus and the highest grade of service.



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Jane and the Owl.

By Gene Stone. Cloth, 162 pages, illustrated.

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Master Frisky.

By Clarence Hawkes. Cloth, 152 pages, illustrated. Published by Thomas Y. Crowell Co., York.

Here are four delightful juvenile books. The stories deal with scenes, sights and subjects designed to interest, instruct and charm the child mind. They are well written and handsomely illustrated, and will serve well for Christmas

Laboratory Manual of English Composition.
By Stanley R. Oldham. Cloth, 148 pages. The
World Book Co., Yonkers-on-Hudson, N. Y.
The purpose of this book is to stimulate good
English thru investigation, comparison and practice. The author believes that the student should become an independent investigator in the field

of English composition.

The work is divided in three parts: I, Composition in General; II, The Forms of Composition; III, Other Essentials. The first deals with the planning of a composition, with paragraphs, sentences and words. The second discusses nare this content of the ration, description, exposition and argumenta-tion. The third treats the subjects of spelling and punctuation, letter-writing, figures of speech, poetry and the use of the library.

Tennyson's Idylls of the King. Cloth, 183 pages.

Shakespeare's A Midsummer Night's Dream. Cloth, 116 pages

Coleridge's The Rime of the Ancient Mariner.
Cloth, 144 pages. Lippincott's Classics. Published by J. B. Lippincott Co., Philadelphia, Pa.
The publishers have indeed made a splendid start in the series of classics intended for use in the spheels and for papular reading.

the schools and for popular reading.

Tennyson's "Idylls of the King" is supplied with notes and introduction by Prof. Willis H.

Wilcox of the Davies and Elkins College, Elkins, W. Va. "A Midsummer Night's Dream" is edited is edited by Prof. Clarence Stratton of the Central High School of St. Louis, Mo. Coleridge's work school of St. Louis, Mo. Coleringe's work is supplied with an introduction and with notes by Dr. Louise Pound, Professor of English of the University of Nebraska. Prof. Edwin C. Miller, Principal of the Northwestern High School, Detroit, Mich., had editorial charge of the entire

The editors have given the great masterpieces a setting designed to awaken an interest in them and to aid an intelligent understanding of them.

The Business Man's English.

The Business Man's English.

By Wallace Edgar Bartholomew, Specialist in Commercial Education, New York State Education Department, and Floyd Hurlbut, Superintendent of Schools, Bay Shore, N. Y. 340 pages. Published by the Macmillan Co., New York.

Here is a book that addresses itself to the modern business man. The author recognizes the importance of good speech. He analyzes the

modern business man. The author recognizes the importance of good speech. He analyzes the purpose of speech as employed, written and spoken, in the business world. He holds that it aims "to convey exact information" and to impel the reader or hearer "to act favorably."

The studies not only deal with the English language from the standpoint of form and accuracy but they deal also with types of business letters and their practical application of various transactions.

transactions

Many valuable suggestions and hints are af-forded in the handling of correspondence and the more technical phases making for efficiency in letter writing and filing.

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By J. L. Neufeld. Cloth, 384 pages, illustrated.
P. Blakiston's Son & Co., Philadelphia.

In the preparation of his book the author has aimed to make the same sufficiently elementary to meet the needs of beginners, and at the same time to give it the scope that will meet college. time, to give it the scope that will meet college entrance requirements. He has applied his ex-perience as high school instructor in arranging his studies with special adaptation to high school students' needs.

Attention is given to factoring. The author's

experience leads him to believe that most fail-

ures in algebra may be traced to ignorance of factoring. A study of graphs is also introduced. A brief history of mathematics, with portraits of some of the world's famous mathematicians, is provided.

Trends of School Costs.

By W. Randolph Burgess. 142 pages. Department of Education, Russell Sage Foundation, New York City.
This volume deals in an analytical way with

the cost of education covering a period of fifty years. It demonstrates thru tables and diagrams, the upward tendency since 1870, showing the increased cost of school buildings and teaching service. The cost per cubic foot, for school buildings has, according to the study made, increased from seventeen cents in 1913 to 53 cents in 1920.

The book is compactly arranged and provides requestly figures on all the increase.

valuable figures on all the important phases of school government involving the element of cost.

National Intelligence Tests.

By M. E. Haggerty, L. M. Terman, E. L. Thorndike, G. M. Whipple, and R. M. Yerkes. Scale A: Form 1. Scale B: Form 1 (with scoring keys, in packages for 25 pupils). Manual of Directions. World Book Co., Yonkers-on-Hudson, N. Y.

These tests have been worked out under the auspices of the National Research Council. They are the army tests adapted for the use of the schools.

schools.

Their use will enable the teacher: First, to classify pupils for instruction on the bases of intelligence; Second, to detect many subnormal or abnormal children; Third, to select unusual children for special observation; Fourth, to make tentative beginnings in the guidance of the vocational choice of children among labor, trades and professions.

Blue Print Reading, Or Interpreting Working

Drawings.

By E. M. Wyatt, Manual Training Supervisor,
Houston, Tex. 85 pages, 6x9 inches. Price, \$1.
The Bruce Publishing Co., Milwaukee, Wis.
The author's experience as a teacher in night
schools where young mechanics sought training
in mechanical drawing has enabled him to pro-

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a textbook that is at once practical and helpful as a classroom aid and for private study. Mr. Wyatt instructs his students in all the

essential features of mechanical and architectural drawing. Thru the aid of a series of illustrations, he makes clear the meaning of various lines, and provides studies in perspective, cabi-

net, oblique and orthographic drawing.

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Manual De Correspondencia Commercial. By Julio Cercado. Cloth, 91 pages. The Gregg Publishing Co., New York, Chicago, Boston, San The Gregg

Francisco

This manual has been prepared for students who enter the fourth or fifth term in commercial or high schools or the second year in college. It deals with export and import trade between the United States and Spanish America and a few

ports in Spain.

The varied exercises following each letter give drill on the many idioms and business terms occurring in these letters. A list of abbreviations and of metrical units, a vocabulary of Spanish-into-English and of English-into-Spanish are valuable helps, yet this manual pre-supposes familiarity with grammatical forms and technical grammar.

In pre-war days some exporters in the United States persisted in sending their goods to South America in barrels while Spanish merchants wished these goods sent in boxes of a certain size and shape. So this trade dwindled until it died. The fixed standards and fondness for ceremony of Spaniards should be remembered and the phrasing of these letters should be carefully studied and skillfully used.

Elementary English Spoken and Written.
By Lamont F. Hodge and Arthur Lee. Book
Two. Cloth, 464 pages, illustrated. Charles E.
Merrill Co., New York and Chicago.
This series of textbooks is based on lessons in

Book One has been enlarged and Book Two has been rewritten, to express more completely the aims of its authors. It is intended

for use in the seventh and eighth grades, each of its four parts supplying work for a half year.

The marked characteristics of Book Two are grammatical exactness, many exercises for the correction of errors in speech and writing, literexcellence in definition, directions, example suggested topics. A sense of proportion has kept all topics well balanced. Some noticeable ones are over-worked connectives, effective use of conmisplaced and dangling participles, what a dictionary tells.

An unusual book, good for close study and frequent reference.

Boys' Book of Sea Fights.

By Chelsea Curtis Fraser. Cloth, 333 pages, illustrated. Thomas Y. Crowell Co., New York.

Beginning with Sir Francis Drake and the Spanish Armada, the author presents some four-

Spanish Armada, the author presents some four-teen stories ending with the Battle of Jutland Bank in the North Sea, the first and last great naval battle in the World War.

Ships in action in famous battles, portraits of great naval commanders are found in the fifteen full-page illustrations. Among the fourteen maps is a diagram of every important engagement which sharply defines the graphic context. The author is plainly in love with his subject and tells us of the unflinching spirit of leaders, the heroism of men in galleys manned by rowers, galleons, with square-set sails, modern battleships

of steel, deadly submarines.

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La Correspondance Elementaire.

By Benedict H. D'Arlon and George A. Gielly.
Cloth, 115 pages. The Gregg Publishing Co., New
York, Chicago, Boston, San Francisco.

Long, cross-written letters belong to the past.

Graceful notes, clear, concise, courteous business letters have come to the front. Tact, a quick perception of existing conditions are greatly needed in writing a good friendly note or a good business letter.

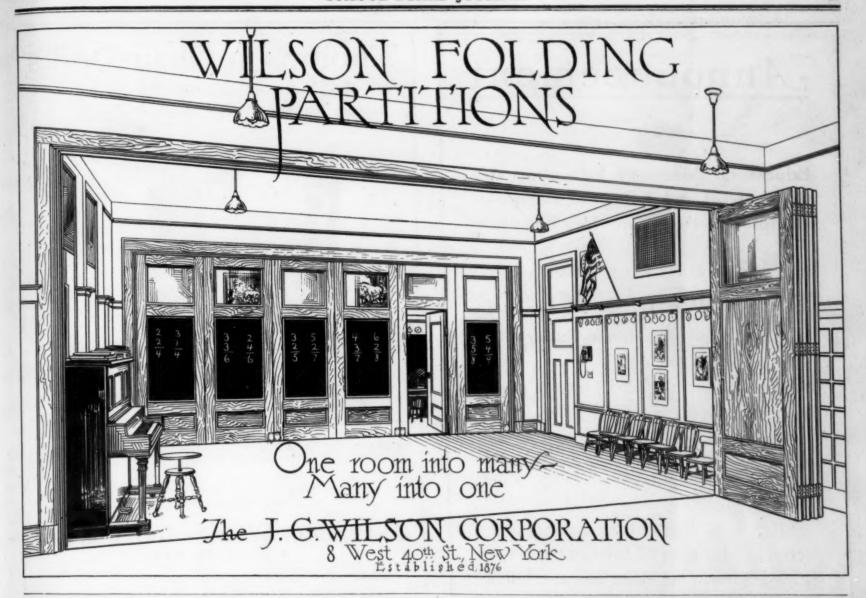
An acknowledgment of a telegram, an order for goods, an announcement of a change of firm name are examples of these letters. Short paragraphs on rights of buyers and sellers, maritime insurance, advertising, an article on French characteristics have a close bearing on the motive of this book. One or two questionnaires form a part of each lesson. As the points made are seldom repeated, these questionnaires should be y studied. Other helps are money tables, commercial abbreviations, vocabularies, carefully studied. conjugation of verb forms.

PUBLICATIONS.

Salary Schedules of the Cleveland Public Schools. This is one of a series of bulletins on what Cleveland's public schools are doing. It deals with the qualifications and conditions of the employment of teachers, principals, supervisors and assistant superintendents. The purpose of the schedules and the general principles and rules to be observed in the administration of and rules to be observed in the administration of same are outlined. A complete salary schedule as adopted is also given.

Adenoids and Arithmetic. This is one of a series of bulletins on what Cleveland's public schools are doing, and is issued by the board of education. It is well illustrated and contains an outline of the medical inspection work since its installation in 1907 upon the recommendation of the Sanitation Committee of the Chamber of Commerce and conducted by the health department, up to the present day.

Health Certificates for Working Children. Issued by the Department of Labor and Industries, Division of Industrial Safety, The Commonwealth of Massachusetts. This pamphlet contains recommendations regarding the issuing of health certificates; charts illustrating the present method of examining children for industry; a form for physical examination used in Boston; several paragraphs on the importance of acquainting the child with the nature of the employment for which it is certified, and a sample form for promise of employment and a physician's certificate of health.



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RURAL SCHOOLS

To rural superintendents, whose work is mainly in the one-room building, the schools of Presque Isle, Me., offer a good example of what be accomplished thru a remodeling of the

Each building in the township is in excellent physical condition, with lighting from the left or left and rear. The toilets are connected to the schoolroom by means of ventilated, covered pas-sageways and access is under the teachers' supervision. A jacketed heater furnishes the heat and supplies ventilation. Single, adjustable seats are attached to oiled hardwood floors and slate black-boards predominate. The teacher has a real

The equipment is supplemented by the community thru school entertainments until pracevery school has good pictures, a drinking fountain, oil stove for lunches, an organ or piano, and a victrola.

The schools are taught by a corps of well

trained teachers, many of whom are normal graduates. Good work is being done in the common branches of the town schools and continued improvement is effected thru the aid of the helping

A high school of modern spirit is maintained. from which a large percentage of the eighth grade is graduated. A large number have taken agricultural courses as provided in the schools.

EVENING SCHOOLS.

evening high school has been Hartford, Conn., sessions to be held three evenings a week, Monday, Wednesday, and Friday, from 7:30 to 9:30 o'clock. The courses, which are free to the residents of Hartford, will include languages and literature, mathematics, sciences, manual arts and commercial arts, freehand drawing, French, sewing and cooking. A deposit of one dollar is required, which is returned to the pupil when the course has been completed. Arlington, Mass., has opened an evening school

to be in session on Monday, Tuesday, and Wednesday, except during vacation periods. There will be advanced and elementary courses in com-

mon school subjects, stenography, typewriting, bookkeeping, cooking, millinery, sewing, mechanical drawing, foreign languages, mathematics, etc.

The Charlestown, Mass., commercial evening high school has been opened with courses in commercial lines, including elementary and advanced bookkeeping, typewriting, shorthand, commercial law, commercial arithmetic and English. Classes will also be formed in Spanish and civil service branches. Classes will be held Monday, Tuesday and Wednesday evenings from seven to nine o'clock

Cambridge, Mass., has opened four distinct evening schools, the elementary, high and indus-trial schools and a trade school for women. All schools with the exception of the trade school, will have classes on Mondays, Wednesdays and Thursdays, the trade school being in session on Tuesday and Friday evenings.

HYGIENE AND SANITATION.
Berkeley, Calif. Fourteen students in the high schools were recently admitted to classes in defiance of an order of the health officer regarding the attendance of diphtheria carriers. The distinct trict attorney had previously ruled that the order

of the health board be carried out compelling the exclusion of "carriers" of diphtheria.

A medical examination system has been installed in the Paris, Tenn., schools. The plan will be along the line of that suggested by the National Education Association. The physicians of the city have offered their services free of charge. Parents who have no knowledge of the physical defects of their children will be made aware of them by this method.

aware of them by this method.

Dr. James Thames, city health officer at Little Rock, Ark., has been made general supervisor and adviser to the school board, for the better supervision of the pupils' health. He has been authorized to organize and direct work of the school nurses in their inspection of pupils, to direct all home visitation asked for by principals, and to follow up work as results of warning notices sent to parents by the medical examiner.

In ten of the public schools in Providence.

In ten of the public schools in Providence, R. I., scales have been installed for the weighing

and measuring of children. children will be given health talks by a local physician, and will also be handed a slip of paper with their actual weight and height and what their weight should be. School nurses will then do follow-up work in the form of advice in their homes, regulation of their diet, etc.

NEWS OF SUPERINTENDENTS.

Rev. T. Caughley, Augusta, Ark., has been elected county superintendent by the Woodruff County Board of Education.

Benedict, for the past ten years superintendent of schools of Sudbury, Dover and Wayland, has been elected superintendent at Manchester, Mass., to succeed Mr. John C. Mackin who has accepted a position as supervising principal of a junior high school at Haverhill, Mass.

Mr. Howard Dunn, superintendent of schools of Kingston, Pembroke, Halifax and Plympton, Mass., has resigned and Mrs. Julia Morton, who has been acting assistant superintendent, has been elected to fill the unexpired term of Mr. Dunn.

Mr. G. A. Yoakum has been acting as head of the training school of the State Normal school,

Flagstaff, Ariz. Mr. W. W. Irwin of Ford City, Pa., has been elected superintendent of schools at Meadville, Pa. Mr. Irwin was supervising principal at Ford City for thirteen years.

Mr. E. L. Porter of Mt. Gilead, O., has been elected superintendent of schools at Greenfield. Mr. Porter served as a Y. M. C. A. secretary in the Argonne sector in France and was educational director for the Eighty-ninth Division of the Army of Occupation in Germany up to May, 1919.

Mr. W. A. Stockinger, for two years principal of the high school at Marion, Ind., has accepted

the superintendency at Noblesville.

Mr. Fren Musselman, principal of the Wash-

ington school at Youngstown, O., has been appointed as assistant to Supt. O. L. Reid.

Glenn V. Scott is superintendent of Floyd County, Ind., schools and Samuel Scott is superintendent of Clark County, Ind., schools. Both were born in Greenville Township, Ind.



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THE WAYNE WORKS

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Richmond, Indiana

MODERN SCHOOL BUILDINGS IN IDAHO.

(Concluded from Page 51)

would be unable to provide separately. And again many of the districts, such as Kilgore, Medicine Lodge, etc., cover such wide territory, that two schools or more are necessary so the scholars do not travel too far during the winter months, and to save the expense of wagons.

In the building of Clark school the cost was materially reduced by the use of old materials from the old school, which had become obsolete.

Some of the buildings, including Ririe, Medicine Lodge, Clark, Blackfoot Technical School, etc., were built two years ago, in the later stages of the World war, the conditions being very unfavorable to building but the need was imperative.

In the Blackfoot technical school a large hall was obtained in the center of the building for the purpose of exhibiting the work of the students, and for graduation exercises. It is lighted by a large ceiling light of obscure glass and gives an air of spaciousness that is very pleasing. The instructor's office is located so as to give him adequate control and supervision over the entire manual training department.

Essential Versus Optional.

The essentials and non-essentials in the consideration of new school buildings and the remodeling of old ones in such wide territory as Idaho, and other western states are matters of importance due to the low assessed valuations of the districts, the limited funds available, and the rapid increase of population.

There are a number of features which are absolutely essential and others which are purely optional. The essential features relate prin-

cipally to the health, safety, and convenience of the pupils, while the non-essentials pertain chiefly to waste of floor space and to idiosyncrasies of design.

Durability is very essential, as the buildings must continue to serve the districts for at least 20 to 30 years, and it is a vital necessity that the materials used in a rural school building should be of the very best.

Good mechanical ability is very scarce in country districts and it is not always easy to get workmen who can make necessary repairs in a proper manner, and it is seldom that any member of the school board has the time or the inclination to look after the upkeep of the building. The result is that the school building is generally neglected, and the poorer the materials the shabbier the building.

It is actually economical to build the smallest school building of first class materials and in a first class manner, as subsequent expenditures for repairs are considerably reduced. The satisfaction to both pupils and teachers of doing school work in such a building is very great from a mental as well as physical point of view.

In the planning and design of rural school buildings it should be remembered that the children receive most of their lasting impressions. They will forget many things that are taught in the school building itself makes seldom, if ever, fades from their memories. Its attractiveness, its adaptation to its purposes, its inspiration to local patriotism, its blessings in affording the best means for the healthy development of physical, mental, and moral powers cannot be overestimated.

Aside from being the place where the children of the community must spend a great part of

some of the best years of their lives, and the most important as far as their health is concerned, the schoolhouse in rural districts should be the social center of the community. And, likewise, it should be the pride of the community—the one spot where the very best there is finds expression. For these reasons the school buildings, both inside and out, should be made as attractive and as wholesome and as sanitary as it is possible for the combined efforts of the whole community to make it.

These results are obtainable by careful consideration to all the problems involved and extravagance reduced to a minimum by incorporating features which add to the use of the buildings and avoiding useless and grotesque features, and for the greatest number of school buildings, it will be found advisable, if the building is to meet the various requirements, to select a reputable architect to work out the problems, instead of the haphazard method of leaving the design and construction of school buildings in the hands of lumber companies and material men, which method has been many times traced as the cause of failure.

State officials of Indiana are considering increasing the 18-cent total of state tax levies to possibly 22 cents on each \$100. Of this four-tenths of a cent may be added to the state tultion fund levy of 5.2 cents which principally maintains the public schools.

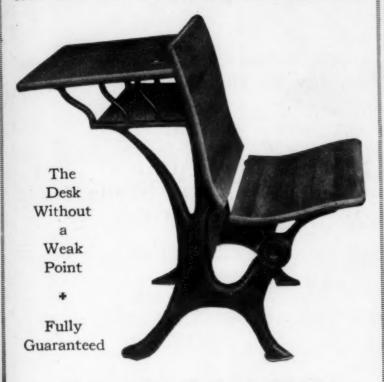
maintains the public schools.

Starkweather, N. D. The citizens have voted \$50,000 in bonds for a new high school building.

A petition has been signed by about 150 citizens of Franklin, Pa., asking the school board to reconsider the levying of a \$5 occupation tax, reducing it to \$1. The petitioners allege that the board is extravagant in that it is spending money for industrial and cooking instruction, cafeteria and playgrounds. They also suggest that a closer and better supervised economy should be practiced.

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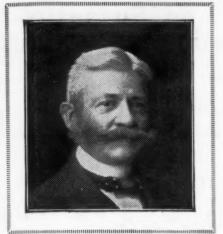
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SPRINGFIELD, MASS.

MILES C. HOLDEN, President

SCHOOL ADMINISTRATION NOTES

Baltimore will have a school survey. school board has appropriated \$25,000 and has employed Dr. George Strayer of Columbia University to conduct the survey.

A state survey of the commercial educational possibilities of Indiana is to be undertaken by a committee headed by State Superintendent L. N. Hines. An expert is to be employed. Kentucky has set a school survey in motion.

Dr. Frank E. Banchman and Dr. W. Shaw, educational experts of New York, have been employed to complete the task. It will take a year's time to make the survey.

The continuation school of Springfield, Mass., has been provided with an employment bureau which will regulate the employment and part-time attendance of pupils between the ages of 14 and 18 years. The bureau will also clear up misunderstanding on the part of parents and students as to the compulsory attendance law.

New York, N. Y. The teaching corps of the public schools has been increased by more than 700 persons to meet a large growth in school population. Additional supervisory teachers have een employed to teach physical training, music, drawing and speech improvement. More visiting teachers will be employed, both for the inrig teachers will be employed, both for the instraction of helpless children in their homes and for general supervisory work. At least one visiting teacher will be assigned to the office of each district superintendent. Additional teachers have been employed in the vocational and trade schools, and sixty persons have been added to the staff of attendance officers to enforce the compulsory education consus and transportation. pulsory education, census and truancy laws.

Wilmington, Del. A subcommittee of the general committee of thirty citizens has prepared a report on the plans for a survey of the Wilmington schools. The findings will be used as a basis for a request to float a bond issue of \$2,000,000 with which to rebuild the entire school plant school plant.

Galesburg, Ill. A new school year of ten months has been adopted for instructors, giving them an opportunity to attend a summer school

Pupils are excluded from the provi-Sions of the rule.

More than 6,000 children were enrolled in the

elementary summer schools while more than 4,000 were in the high-school classes. The inclinations of the students showed that more than half of those in high-school classes were trying to gain a semester and the same was true of more than a third of the 6,000 in elementary

Teachers in the Lincoln, Neb., schools in answer to criticisms in a contract dispute, stated that they would prefer to be classed as civil servants like state and county superintendents and judges, who are elected or appointed for a definite term, may resign at will, and cannot be removed without cause. To prevent them from resigning when opportunity to advance is offered would be suicidal to a community for it would deprive teachers of ambition.

After a thoro discussion of the resignation question by the Portland, Ore., school board, it was decided that teachers who in the future resign without giving the required 60 days' notice will have their teaching certificates revoked unless the board specifically agrees to accept such less the board specifically agrees to accept such

In compliance with the decision of State Superintendent Finegan of the Mahanoy City, Pa., schools, that it is for the best interest of the public schools, the teachers' union, by a majority vote, withdrew from the Federation of Teachers connected with the American Federation of Labor.
Of late the old-fashioned wall clocks have been

supplanted by alarm clocks for teachers' desks. The alarm clock costs less, is cheaper to repair, and, according to the school marms, makes for more study of lesson and less speculation on the perversity of slow-moving clock hands.

OFFICIAL PUBLICATIONS

Safety Fundamentals. Lectures at the Safety Institute of America, 1919. Published by the Institute at New York, N. Y.

Opportunities for the Study of Engineering at American Higher Institutions. Circular No. 20, 1920, of the U. S. Bureau of Education, Depart-

ment of the Interior. The pamphlet discusses the scope and general method of engineering schools and colleges, the entrance requirements, tuition and cost of living, and other information which the prospective student of engineering should know in his attempt to select the institution which he will extend

tion which he will attend.

Report of the Salary Information Committee of the Toledo Teachers' Association, August, 1920.

Published by the Toledo board of education. The material represents the results of data collected from some 27 cities of the country and such other material as could be obtained from monographs, pamphlets, and articles in the educational journals and newspapers. The pamphlet discusses the matter of uniformity in yearly increases, the problem of basis of promotion, teacher rating, differentiating between salaries of monographs women and the teacher shorters. of men and women, and the teacher shortage. There are some tables of comparative statistics

There are some tables of comparative statistics for the purpose of showing that the teaching profession receives such a low compensation as to actually discredit it as a profession.

Syllabus in Spelling. Course of study for the Rockingham, Vt., schools for 1920. Prepared and arranged under the direction of Supt. W. C. McGinnis. Issued by the board of education.

Wisconsin Public Comfort Station Code and Rest Room Suggestions. Issued by the Wisconsin State Board of Health and prepared by the

sin State Board of Health and prepared by the Plumbing and Domestic Sanitary Engineering Division. This is a code of rules and regulations and suggestions placed at the disposal of local governing bodies and others interested, by the State Board of Health, with the request that a careful study of its contents be made before pro-ceeding with the construction of a new station or the remodeling of an existing structure. These rules and regulations, known as the State Public Comfort Station Code, were adopted by the Wisconsin State Board of Health on January 20 1920, and have the force and effect of law.

Mr. J. H. Davis has been elected superintendent of schools at North Little Rock, Ark. St. Joseph, Mo., teachers have been given a flat increase of \$100 a year.

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DETERMINING THE NUMBER OF ROOMS FOR A DEPARTMENTAL SCHOOL BUILDING.

(Concluded from Page 37)

additional room. We indicate this by 2 minus

In rooms for special subjects such as laboratories, shops, etc., the fractional answer must be considered as a unit. Woodworking requires nine class periods, dividing by fifteen because there are only three double periods per day and fifteen in a week, we have 9/15. This room is used nine out of the fifteen possible periods but since its type makes it unusable for other subjects, the six extra periods are not available and the room is given as a unit to the one subject for which it was designed.

The superintendent must be consulted by the architect in meeting this condition.

Standard classrooms and some rooms used for special purposes may be used interchangeably for study or for recitation.

In these rooms with multiple use the plus and minus periods are to be combined. If the sum is a plus number, there is that number of excess periods. Divide this number of excess periods by the number of periods per week per room. The whole number indicates the number of rooms which may be subtracted from the sum obtained by adding the whole numbers, disregard fractions.

If the sum of the plus and minus quantities is a minus number this indicates the number of periods we must add.

Divide this minus quantity by the number of periods per week per room.

If the answer is a whole number, this additional number or rooms is needed, and must be added to the sum of the whole numbers, and any fraction in the answer must be treated as an additional unit.

The pressing need for school buildings for the most efficient education of our people must be met, generously,—not lavishly,—but with wisdom and economy.

The superintendent can calculate accurately the demand for school accommodation in his community, and will be able to plan a program which will meet its educational needs; with the data he can give the architect, school buildings should be produced which will accommodate all pupils, and in these buildings we should find no longer—an appreciable per cent of the rooms iying idle thru any large part of the day. Whole hearted cooperation between educator and architect is the foundation for America's hope—the best possible opportunity offered wisely to all her children.

ACCOUNTING SYSTEM AND BUDGET OF A SMALL CITY.

(Concluded from Page 43)

dividual member would see at a glance the exact status of that item and govern himself accordingly.

The general use by schools, large and small, of accounting systems of this type adapted both to the Bureau of Education reports and to State reports would soon give us a common basis for computing unit costs for the various items. At present there is no adequate basis on which to compute such costs. We have, on the one hand, no clearly defined line between the items that constitute operation and those that go to make up maintenance; on the other hand, we compute "cost per pupil" on the basis of total enrollment, average daily attendance and average enrollment, the last varying according to the prac-

tice of continuing a pupil's membership one, two, three, four, or five days after he stops school. We could, however, be on a ground more nearly common if we were to have fairly uniform and reasonably full and accurate school accounting systems.

ARE TEACHERS HUMAN BEINGS?

(Continued from Page 45

is a lot of; what are those things; oh! just human skulls of poor teachers who had so much learning that their heads were too big, but they were tied up by children who thought they were not human, they thought they were big headed reptiles and they just hated them, so they killed them all and put them on this ship, and pretty soon the ship sank it was so heavy, but the little castles floated away on the big life raft and the little people lived happily ever after, and then the bell rang and you woke up and realized that you have a very vivid imagination after all, and that you have an old-fashioned play impulse, and that you can make up a story, and possibly you can be human.

But that is a requirement of all art, imagination, which is another word for originality. Do you remember how much you liked the boy with whom you played who could make up new kinds of play, and who never said, "What let's do?" Do you ever think of your childhood, and do you think what kids did when you were one of them?

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Perhaps this sounds like preaching and finding fault with my profession but it is far from that. I am trying only to awaken some of the people who have had a narrow viewpoint and help you to become more of a human being, so that people will say of you, how nice you are.

(Concluded on Page 104)

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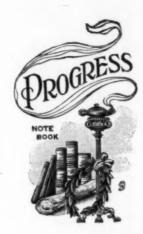
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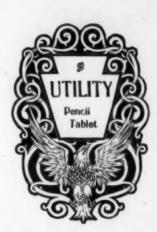
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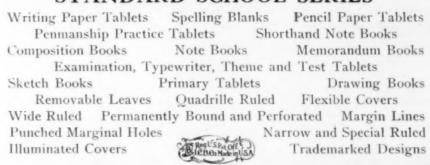








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(Concluded from Page 100)

instead of "Oh! here comes that school teacher!" Perhaps you might try and make yourself over a little for the sake of yourself and the community and the kids who have not lost their humanity yet, thank goodness. If you can do creative art, do it for heaven's sake (your own too) and forget the "gabfest," which means don't talk too much, and get in and do some real original thing that you never thought you could do. Try and get a job in the movies. If you never get one you will at least have an experience that will broaden you, asking for it.

Make your imagination work, and be as someone has said a "hellofafella" without shouting about it, and look how well your feet are dressed, and don't wear gray all of the time. People will spot you a mile off. Learn how to dance and do it if you are not over 50, but if you are past that age, get an auto, it will do just as well. Oh! I know they haven't raised your salary yet, but they will by next fall.

Do something besides grasping the knowledge. Do some creative work. Mix with people who are not school teachers, and when you see them forget about your work, and try and talk of something that is far from your line of endeavor. If you do even some of these things, you may become human, if not then you are just a school teacher and one of "those things," and may the good Lord deliver you from yourself. Your heart may be all right but your spark plugs need cleaning and you are only running on two cylinders.

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The explanation we desire to make is that the communication in question did not come from the writer known as "A Superintendent's Wife." The latter has since taken occasion to say that "The longer I live the more firmly I believe that honesty and devotion to duty do pay, even in dollars and cents."

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(To be continued in the December Number)

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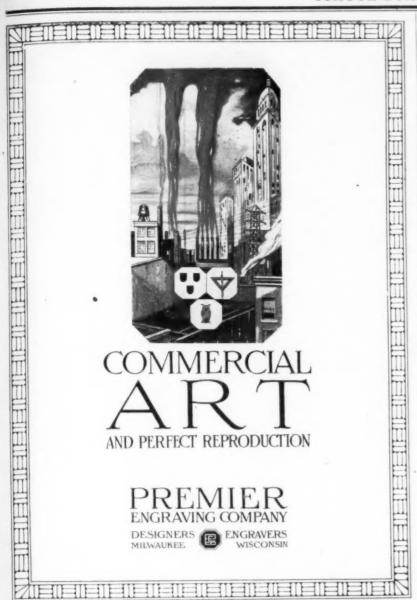
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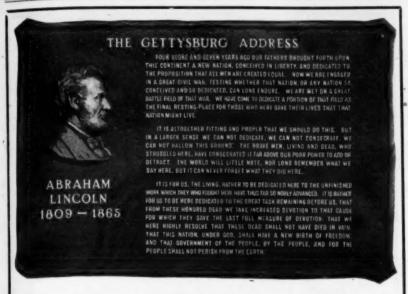
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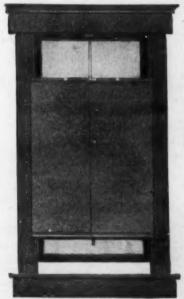
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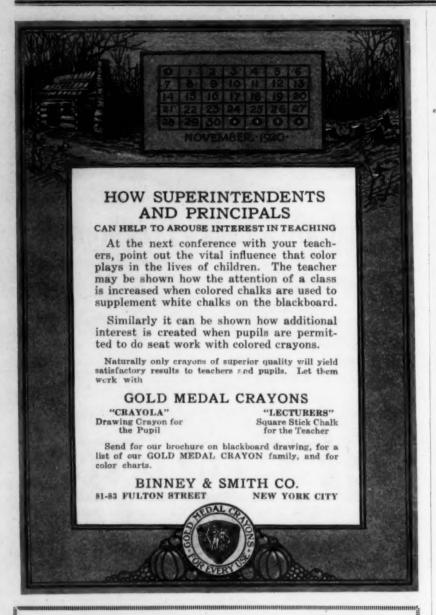
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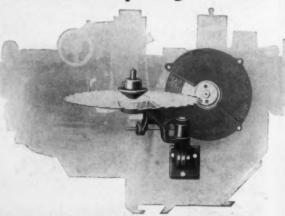
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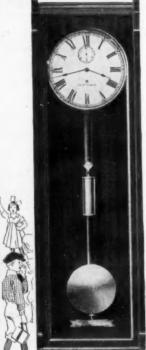
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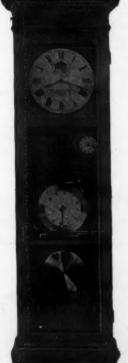
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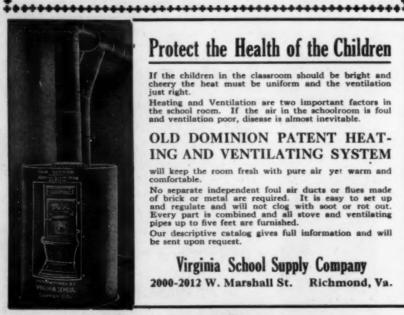
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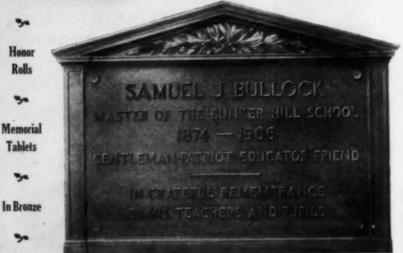
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Competitive Examination.

Not all examinations in Scotland are for the civil service. In his "Memories Grave and Gay," Mr. John Kerr reports one held at a village tav-ern to decide a wager, and, incidentally, to determine the relative scholarship of two school-girls. Their respective fathers had started the discus-

ion over the table.

"Och, yes," said Norman, "we must give more education to the lassies than to the lads."

"Faith, Norman," said Duncan, "I dare say you're very richt there, and I'm sure there's not a man in all Sutherland can throw a stone at me for that. Our Mary is the cleverest lassie in all Sutherland: there's not a lessie in the Receivers. Sutherland; there's not a lassie in the Reay country like her. She's a grand scholar, our Mary."
"Your Mary?" said Norman.
"Yes, our Mary."

"I'll wager you my Jessie is as clever a lassie as your Mary."

Your Jessie?

"Aye, jist my Jessie."
"Done," says Duncan.
"But who will examine the lassies?" says Norman.

man.

"Well," said Duncan, "I think you should let me examine them. You see, I have jist been down at the examination of Kinlochbervie school today, and the ministers was there, and the parents was there, and the ministers was asking them questions, and the children would be answering them. It was a grand sight, noble, and I was there, and as I'll be jist fresh off the irons, I think you should let me examine the lassies."

"Very well, Duncan, you'll examine them."

The girls meanwhile were amusing themselves outside. Norman rang the bell and asked the servant to send in Jessie. When she appeared Duncan began:

Duncan began:

your father says you're you're a grand our Mary. Now 'Jessie, scholar, and as clever a lassie as our Mary. Now jist tell me this, do you know the meaning of a "No, I do not," said Jessie.

"That will do for you. Jist go you away and send in our Mary."

When Mary appeared, Duncan said, "Now, Mary, I have been telling Norman that you're the best scholar in Sutherland. Jist show him how clever you are. Do you know the meaning of a verrub [verb]?"

"Yes," in quite a triumphant tone, "it's a noun."

Duncan looked defiantly at Norman and says, "There, now, my friend, what do you think of that? Didn't I tell you she was the cleverest lassie in the Reay country?"



Good Service.

Johnson: I understand the teachers' survey committee found a lot of waste in the high

Yes, there were only three teachers where there might have been five.

SCHOOL BOARD JOURNAL

Thinking of Ex-Kings.

A teacher in one of the lower grades was looking at a map of Europe and said: "Who knows "Who knows what Helvetia is

Instantly a little hand began to wave wildly. "Well, Johnny, what is it?"

"Helvetia is the Hell for swell people," was the prompt answer.

His Father is a Broker.
"Gustave, what part of the earth is all water?"
"The Stock Exchange, ma'am."

Hardships Indeed.

The class in history was wrestling with the terrible experiences of the Continental Army at Valley Forge, when the teacher asked some one to describe the hardships of the patriot army. A small girl finally volunteered an answer, brief and comprehensive: "The hardships at Valley Forge were very hard ships, they were the hard-est ships in all the world!"

The After-Dinner Speech.
William Lyon Phelps, professor of English literature at Yale, declares he gets credit for only twenty-five per cent of the after-dinner speeches he actually makes. "Every time I accept an invitation to speak, I really make four addresses." First, is the speech I prepare in advance. That is pretty good. Second, is the speech I really make. Third, is the speech I make on the way home, which is the best of all, and fourth is the speech the newspapers next morning say I made, which bears no relation to any of the others."— New York Tribune.

Such a Little School.

The teacher of a certain country school was making a report to the superintendent.

"And did I understand you to say," asked he,

"that fifty per cent of your pupils are foreign-

"Oh, no," was the reply; "there are not fifty per cent of pupils in the whole school." — Woman's Home Companion.

The "Hymn."

The language lesson assigned for a s.xth-grade class contained the words hymn and him to be used correctly in sentences.

Joe, a ten-year-old son of Erin, wrote, "Mary

sewed the hymn of her dress.

Up-to-Date Mother Goose.

The teacher was telling the story of Red Riding Hood. She had described the woods and the wild animals that live there.

"Suddenly," she said, "Red Riding Hood heard a loud noise. She turned around, and what do you suppose she saw standing there, looking at her and showing all its sharp, white teeth?"

"Teddy Roosevelt!" cried one of the boys.—Indee

Teacher-"What tense does this illustrate? 'I have a million pounds'. George-"Pretens

His "College"

During debate in the New York State Assembly one day, when Governor Smith was a member of that body, another member arose to a question of personal privilege and announced that Cornell had won the boat race at Poughkeepsie, adding that he was a graduate of Cornell. This started reminiscence meeting, other members arising tell the name of their alma mater. Smith finally rose and announced:
"I am a graduate of the F. F. M."

"What college is that?"
"Fulton Fish Market."—World's Work.

Not Educated.

An old negro approached a white man in a Southern town and asked: "Marse Tom, you ain't

seed anything of dat old mule of mine, is you?"
"Why, no, Henry, I haven't seen that mule.

Have you lost it?"
"Well, Ah do' know ef Ah've lost him or not,

t 'e's shore 'nuff gone." "Henry, I suspect the best way you can find that mule would be to put an ad in the paper for

"Shucks! Dat wouldn't do no good, Marse Tom, you know puffickly well dat dat mule can't

"As Shakespeare says, 'What's in a name?' "
"Well, call me one that I don't like, and I'll show you!"

A parent complained to the principal of the conduct of his son. He related to the latter all the escapades.

"You should speak to him with firmness and recall him to his duty," said the principal.

"I have, of course; but he pays not the least attention to what I say. He listens only to the advice of fools. I wish you would talk to him."



VACUUM STEAM HEATING SYSTEM.

The Warren Webster Co., Camden, N. J., has issued a descriptive catalog of its Webster feed-

water heaters for use in public buildings.

The catalog describes and illustrates a number of types of boiler heaters for different kinds and sizes of institutions. The firm claims for its system satisfactory heating, economy of coal consumption, absence of oil secretion, economy of steam, and a minimum of repair and upkeep. It makes possible large storage space, easy cleaning, economy of fresh water, and longer life to

Information concerning the Webster feed-water system may be obtained by writing the Warren Webster Company at Camden, N. J.

MR. KAULA APPOINTED.

The American Crayon Company makes the announcement that it has opened an eastern office at the Bush Terminal Sales Building, 130 West 42nd Street, with F. Edward Kaula as eastern and southern manager of the educational department. Mr. Kaula was formerly connected with with the World Book Company and with D. Appleton & Company.

NYSTROM'S NEW CATALOG.

Greginal Silve American Educations The

Star

A. J. Nystrom & Company, of Chicago, announce the publication of a new catalog covering the "Johnston-Nystrom Line of better maps. globes and charts." The new book contains 136 pages of description and prices of illustrative material for the effective study and teaching of geography, history, physiology, botany and zool-ogy. Several new items have been added, such as maps for use in teaching the commercial geography of the United States and several series of charts illustrating botanical and zoological subjects. The first edition of this catalog is limited, but copies will be sent free as long as they last to all who ask for a copy.

ISSUE CATALOG OF ALL-STEEL FOUNDRY FLASKS.

The Oliver Machinery Company of Grand Rapids, Mich., has issued its new catalog describg the all-steel flasks made by the firm. The Oliver All-Steel Self-Releasing Snap Flask

consists of a bench flask outfit comprising a cope, a drag and six jackets. There is a sand support within the flask at the parting line, a lever connection for operating the opposite support, malleable iron lugs and pins perfectly fitted and hardened, and jackets tapered to match the

School authorities, and teachers of foundry work in shops, may obtain information about the Oliver All-Steel Flasks by addressing the company at Grand Rapids, Mich.

ISSUE HEATING CATALOG.

The Buffalo Forge Company, of Buffalo, N. Y., has issued Catalog No. 460, describing its standard heaters for use in different types of public buildings. The Buffalo heater has been designed to meet peculiar requirements in heating and to

The points of advantage claimed for the heater by the firm are perfect circulation of steam, avoiding air binding; perfect drainage, preventing water pocketing and condensation in pipes; a large radiating surface, making for uniform velocity of air thru coils and preventing unnecessary loss of pressure; sections independently con nected to the steam main and steam supply valves, giving absolute control of air tempera-ture and heater effects and making for easy re-pair of parts. The pamphlet is well supplied pair of parts. The pamphlet is well supplied with tables of sizes and dimensions, air pressure, temperature and condensation, steam pressure

and pipe sizes.

The catalog should prove useful to architects and engineers who are required to figure heating requirements for fan heating and ventilating

School authorities and architects who are interested in the Buffalo equipment should address the Buffalo Forge Company at Buffalo, N. Y.

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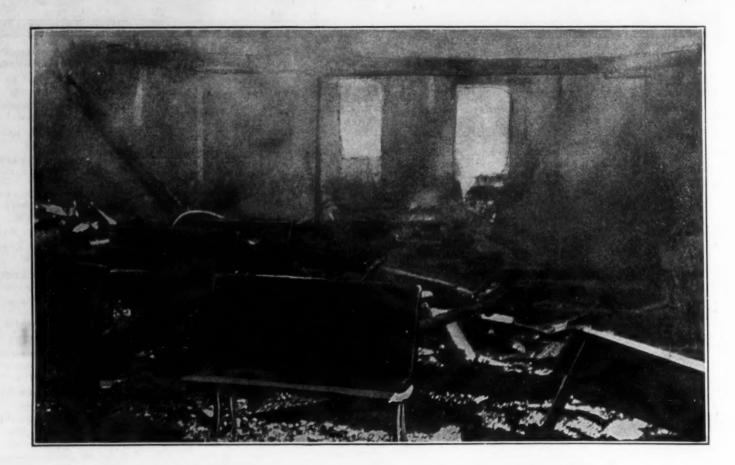
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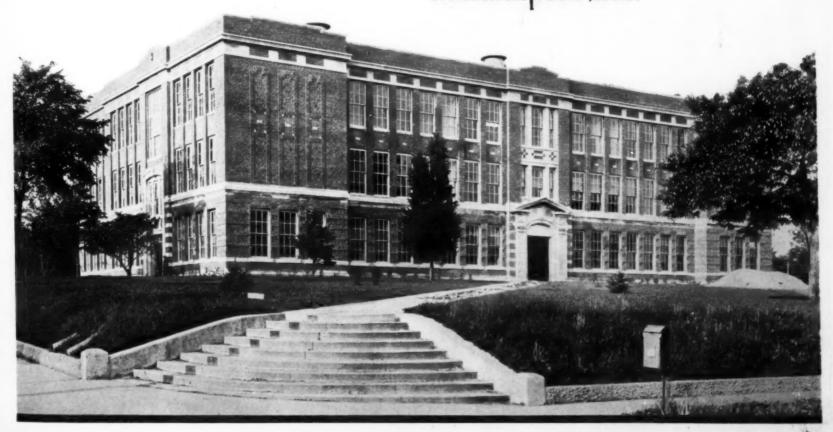
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